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# BOOK OF INDIAN ERAS.

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## BOOK

OF

INDIAN ERAS,

WITH

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### TABLES FOR CALCULATING

### INDIAN DATES.

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BY

ALEXANDER CUNNINGHAM, C.S.I., C.I.E., MAJOB-GENEBAL, BOYAL ENGINEERS (BENGAL).

Every nation forms an era from some remarkable event, such as a change in religion, the accession of one family to the throne, upon the extinction or expulsion of another, a great earthquake or a flood.—ABUL-FAEL

> CALCUTTA: THACKER, SPINK AND CO.

> > 1883.



CALCUITA : PRINTED BY THACKEE, SPINK AND CO.

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Most of the Tables in this Book were prepared for my own use so far back as 1859. I had long felt the want of some handy and ready means of calculating Indian dates, as the process described in Warren's Kâla Sankâlita and Prinsep's Useful Tables is both cumbrous and troublesome. It struck me that, by substituting decimal parts of days for the Hindu gharis, palas, and vipalas, and by lessening the number of items to be taken out from the tables, the process would be made much more easy. The road in both is the same, but I believe that I have made it both shorter and smoother. The best test, however, of the advantage of my process will be to compare it with one of Warren's own examples for finding the initial day of both the Solar and Luni-Solar Calendars for the year of Kâli-Yuga 4923 complete = A.D. 1822.

The following is my process :

SOLAR AHAR	GANA.	:	LUNI-SOLAR AHARGANA.				
Surya Siddhânta,	Table XII.	5	Surya Siddhânta, Table XIII. 8 and 1736,398 <sup>,5</sup> 710 days.				
4900 years	<b>= 1789,168·9067</b>	days and					
23 "	= 8,400 <sup>.</sup> 9514	<b>,,</b> ,,	8,150 4422 "				
4923 years	<b>—</b> 1798,168 <sup>.</sup> 8581	d <b>ays a</b> nd	1744,549 0132 days				
Deduct constant	2·1475		d of the second s				
Solar Ahargana	1798,166.7106	$\div 7 = 6.7$ or $\%$	7 days over — Frida	y, 12th April 1822,			
Luni-Solar Ahargana	1744,549.0132		lst	day of solar year.			
	53,617·6974						
Dd. 1800 Lunations	<b>53,155</b> 0582						
Table XIV	462.6392						
Dd. 15 Lunations	442-9587						

Conjunction 19.6805 or 20 days earlier - Saturday, 23rd March. Beginning of Luni-Solar year 1 day later - Sunday, 24th March.

The following is Warren's process. See his Kâla Sankâlita, p. 240, and Tables, pp. 65 and 66.

Wanted the beginning of the Solar year 4923 Kâli-Yuga, according to the Surya Siddhânta-

Years.	Days.	G.	v.	Р.
4000	1461,035	1	33	20
900	328,732	52	51	0
20	7,305	10	30	28
3	1,095	51	29	<b>22</b>
		_	-	—
	1798,168	51	29	22
Subtract Sodhyam	2	8	51	15
		-	_	_
Divided by 7	1798,166	42	38	7
Remainder .	60	ver,		

Remainder ...

which, counted from Friday, gives Suta-dina = Thursday.

[N.B.—Here Thursday is a misprint for Friday, as the large fraction of a day, upwards of 42 gharis, or more than two-thirds of a day, is practically a whole day; so that the remainder of 6 days +42 gharis is reckoned as 7 days, as noted by Warren himself on page 65 at the foot of Example II, where he states that by the Surya Siddhânta the initial day is Friday.]

Warren's Luni-Solar example is on page 66 of his Tables.

Wanted the beginning of the Luni-Solar year 4293 Kâli-Yuga, according to the Surya Siddhanta-

Years.	Days.							Years.	Days.	G.	v.	Р.
4923 ==	1.798,166		•••	•••		•••		4000	1417,468	13	16	49
(1)	1.754,549		•••	•••	•••	•••	•••	900	318,930	20	59	17
	53,617			•••				20	7,087	20	27	59
(2)	35,436		•••		•••			3	1,063	6	4	11
	18,181								1.744,549		48	17
(3)	17,718	(2)	100	Lunar	years	•••			35,436	42	19	55
	463	(3)	50	dit	to		•••		17,718	21	9	57
(4)	35 <del>4</del>	(4)	1	dit	to	•••			854	22	1	$^{23}$
	109	(5)	3 ]	Lunar	months				88	35	30	20
(5)	88								·	-		_
Remai	nder 21					•••			1.798,147	1	49	56
									+ 1			
					Lunig		hange		1 709 149			

Luni-Solar Ahargana ... 1.798,148 Divide by 7

256,878 weeks + 2 days.

Remainder 2, counted from Thursday, gives Saturday for the Suta-dina, or day of conjunction.

In the tables for finding the corresponding dates for any Hijra day I believe that I have made the process more certain as well as more easy, by the adoption of a table, No. XV, showing the number of each day in the Muhammadan year. By this means the corresponding Christian day of any Muhammadan date can be ascertainted with absolute certainty in a few minutes.

The tables connected with the Christian year appear to me to be much simpler than any others that I have met with. I prepared them for my own use in 1859, and I have since had so many opportunities of testing their accuracy as well as their easy working, that I have no hesitation in putting them forward as really useful and handy Tables.

For the Tables of the Seleukidan era, I must crave some indulgence, as the subject is one of much difficulty, partly owing to the meagreness of trustworthy data, and partly to the adoption of the Julian reckoning in the western half of the Syro-Macedonian Empire after its annexation to Rome. As my object is to treat of Indian eras only, I have retained the use of the cycle of Meton with its embolismic months, as I feel quite satisfied that the Julian reckoning was never adopted in the eastern provinces subject to the Bactrian Greeks and Parthians.

The present work differs from others on the same subject, not only in the greater completeness as to the number of eras treated of, but also in the greater handiness and simplicity of its Tables for calculation. I believe, therefore, that this "Book of Indian Eras" will help to supply a want, which has long been felt, in its numerous tables for the calculation of any Indian dates by easy and simple processes.

The most useful works on Indian Measures of Time that I am acquainted with, are the following :--

Warren's Kâla Sankâlita, 1825. Jervis's Weights, Measures, and Coins of India. Prinsep's Useful Tables, 1834. Cowasjee Patell's Chronology, 1866.

Colonel Warren, who belonged to the French family of De Warenne, was one of the officers of the Great Trigonometrical Survey. His work gives an elaborate exposition of the Hindu solar and luni-solar measures of time with an account of the Vrihaspati Chakra, or Jupiter cycle of sixty years, and a memoir on the lunar year of the Muhammadans. At the end he has given a series of very useful tables for facilitating the computation of Indian dates. The Kâla Sankâlita is valuable for its accuracy, but its Tables are rather cumbrous and troublesome for any large number of calculations. My own Hindu Tables are simpler and

easier to work with than Warren's, but they are essentially the same, and were, in fact, based upon his elaborate and more cumbrous processes.

Jervis's Measures of Time form only part of his large work on Indian Weights and Measures. His Muhammadan calendar is excellent; but his list of the corresponding years of the Vikramâditya Sambat is entirely vitiated by his adoption of the wrong initial point of the era as 56 B.C., instead of 57 or 56<sup>‡</sup>. His account of the 60-year cycle of Jupiter is limited to the corrupt form in use in Southern India.

James Prinsep's Useful Tables are founded almost entirely on Warren's Kâla Sankâlita. But his tabular forms are much more handy than those of Warren, and his calendric scales for ascertaining corresponding dates by simple inspection are a really useful invention. For his own use he hadwooden cylinders prepared round which the scales were pasted, so that the initial day of any Hindu or Muhammadan year could be set at once to its corresponding date in the Christian calendar. There are several misprints; but the only serious one is in the table of Hindu sidereal years, where the initial days of the Christian years on the left hand from A.D. 1753 onwards are continued in Old Style, while the initial days of the corresponding Hindu years are given in New Style right down to the end. Thus the present year A.D. 1882 is made to begin on Friday (which is O.S.), instead of on Sunday (N.S.), while *Tuesday* the 10th April is given as the beginning of the Hindu year in N.S.

Cowasjee Patell's Chronology is an extremely useful practical work, as it gives a large number of corresponding lists of years of different eras "in use among Parsis, Jews, Greeks, Hindus, Muhammadans, Chinese, Japanese, &c. The brief accounts of the eras are generally taken from Prinsep, as well as the rules for calculating the dates. The Tables are singularly free from misprints; but whilst I was calculating my own Tables and comparing them with his, I found the following errata, which may be worth noting by all those who possess a copy of his work.

In A.D. 141 and again in A.D. 543, the name of the intercalary month has been omitted:

In A.D. 999, for 19th March, read 21st March.

------- 1344, for 15th March, road 16th March.

------ 1655, for 26th February, read 28th March.

A very curious coincidence of dates came accidentally to my notice

during the past cold season. At Boram Deo in the Central Provinces I found several inscribed Sati Pillars, two of which gave the name of the year of the 60-year cycle of Jupiter in addition to the Samvat date. These two inscriptions are recorded as follows :---

A.—Swasti Samvat 1430 samayo Sidhârthi nâma Savachhara.

B.—Samvat 1445 Bhâva nâma Samvatsara Aswina badi 13 Some.

As Boram Deo is in Chattisgarh or Mahâ Kosala, which formed the old kingdom of the Chedis or Kalachuris, I thought it most probable that these dates were reckoned in the Chedi or Kalachuri Samvat of which the initial point, as I have previously shown, was A.D. 249 = 0. Reckoning from this starting point, the date of A would be 1430 + 249 = 1679 A.D., which was actually the year Sidhârthi, according to the computation of the cycle in use in Southern India.

Similarly the date of B would be 1445 + 249 = 1694 A.D., which was actually the year Bhâva of the Southern reckoning.

Here then I thought that I had found a clear proof that the Chedi or Kalachuri era had continued in use down to A.D. 1694. But when I proceeded to calculate the week day of B, I found that it did not agree with A.D. 1694. It then struck me that the Samvat might be that of Vikramâditya, according to which the date of A would be 1430 - 57 = 1373 A.D., which to my surprise proved to be also the year Sidhârthi of the Northern reckoning of the 60-year cycle. Similarly the date of B would be 1445 - 57 = 1388 A.D., which was also the year Bhâva of the Northern reckoning. On calculating the week day of B, I found that it agreed exactly with the Vikramâditya Samvat, as the 13th of Aswina-badi in Vik. Sam. 1445 was actually a Monday. Without this mention of the week day, the true equivalent of these two dates would, therefore, have been doubtful, and I should certainly have been inclined to refer them to the Chedi era.

Of course, this coincidence could only happen within the limit of the 86-year period in which these two dates are included, as the omission of every 86th name of the Jupiter Cycle in the Northern reckoning would make all the earlier northern names later, and all the latter ones earlier.

Since the text of this book was printed, a notice of my attempt to fix the date of the Gupta era has been published by Dr. Thibaut, Principal of the Benares College.\* His remarks are confined to the calculations

\* Indian Antiquary, Vol. XI, p. 322.

based on the 12-year cycle of Jupiter, as he considers it highly probable that the modern system of Hindu astronomy, with its fairly accurate knowledge of the planetary revolutions. "was not well established before A.D. 400." This I fully admit as far as the existing Siddhantas are concerned. But the fact that the Macedonian months were in use in Northern India, certainly during the 1st and 2nd centuries A.D., offers, in my opinion, a clear proof that the people of North-Western India had adopted the Macedonian era of the Seleukidæ. Now the Greeks of Alexander's army must have brought with them the calendar of Meton, which was a luni-solar cycle of 19 solar years of 3654 days each, or 235 lunar months." But this is the very cycle that is still used by the Hindus themselves, and I have very little doubt that they must have corrected the old erroneous reckoning of Garga by the Greek calendar of Meton.

If this conclusion be right, then the Hindus of the 1st and 2nd centuries A.D. must have had a nearly accurate knowledge of the length of the solar year, the amount of error being only one day in 76 years. It seems to me, therefore, not improbable that a fairly accurate adaptation of the cycle of Jupiter to the reckoning of the solar year may be as old as the time of the Indo-Scythians, who made use of the Macedonian calendar in their inscriptions. Of course this is not a proof that the reckoning of the Arya and Surya Siddhântas was in use at so early a period. But it is, in my opinion, a very strong argument that a nearly accurate reckoning must already have been adopted.

I am perfectly aware that the date of the Gupta era is still unsettled ; but there is one fact that is strongly in favour of the early period that I have arrived at,-namely, the date of A.D. 319, which is assigned by Abu Rihân for the extinction of the Gupta dominion. Now the last of the great Gupta kings was almost certainly Skanda Gupta, and as we have a copperplate inscription dated in the year 146, during his reign. the initial point of the era cannot well be placed later than 319-146=173A.D., that is within seven years of my proposed date. I, therefore, adhere for the present to the year 166 A.D. as a convenient date, which cannot be far from the truth. In fact the two inscriptions of King Jaika, if they belong to the same person, are very strongly in favour of my date. One of these is dated in the year 794 of the Vikramaditya Samvat, or A.D. 737-38, and the other, from Morbi, is dated in 595 of the Gupta era. Deducting 595 from 738, we get the year 143 A.D., which is 23 years earlier than my date. But if we accept my date as a near approximation to the truth, we obtain 166 + 595 = 761 A.D., as the date of the

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<sup>\*</sup> See my account of the Seleukidan era in this volume.

Morbi inscription, which would give King Jaika a reign of 23 years from 738 to 761 A.D.\*

In Table XVIII I have added a list of eclipses, both lunar and solar, from the beginning of the Christian era down to A.D. 2000. These have been taken from the celebrated French work "L'Art de verifier les dates"—Vol. I, 8vo., 1818. In the original work the hour of each eclipse is given for the meridian of Paris. These I have omitted for want of space. While copying out the dates, I have noted a few errors and omissions, namely :—

A.D. 1341, for Lunar Eolipse, 13th May, read 31st May.
A.D. 1392 for Lunar Eolipse, — Sept., read 2nd Sept.
A.D. 1488, for Solar Eolipse, 9th July, read Lunar.
A.D. 1916, for Lunar Eolipse, 8th January, read 18th.

To show how easy it is to make mistakes in dates, it will be sufficient to state that the Emperor Bâber has given the wrong date for his own famous battle of Khânwa, in which he defeated Râna Sangrâm of Mewâr. Bâber says that it took place on Saturday, the 13th of the second Jamâdi, A.H. 933, which both Erskine and Dowson make the 16th March A.D. 1527.<sup>†</sup> That the name of the week day is correct we learn from Shekh Zein-uddin, who repeats the name in the following quotation from the Korân : "Since God has given a blessing on your Saturday." But the 13th of the second Jamâdi was a Sunday as will be seen from Bâber's own statements of other dates in the same year. Thus he calls—

24th Muharram	933	•••	•••	•••	a	Wodnesday.
15th Safar	,,			•••	•••	Wednesday.
16th Rabi I	,,	•••		•••	•••	Friday.
9th Jamadi I	.,	•••	•••	•••	•••	Monday.
14th "	,,	•••	•••	•••	•••	Saturday.

All of these dates bring us to Monday as the 30th or last day of Jamâdi I, and to Tuesday as the 1st of Jamâdi II. Consequently, Saturday was the 12th and not the 13th of that month—a fact which has escaped the notice of both Erskine and Dowson.

With reference to the intercalary months of the Hindu luni-solar year, I may mention that there is a great divergence between the published lists of Jervis and Cowasjee Patell.<sup>‡</sup> At page 91 I have quoted the native rule as given by Warren and Prinsep, and the following example will show that the table published by Jervis is certainly wrong :

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<sup>\*</sup> For these two inscriptions of Jaika, see my accounts of the Gupta and Vikramåditya eras in this volume.

<sup>†</sup> Baber's Memoirs, translated by Erskine, p. 258.

Jervis's Weights, Measures, and Coins of India, p. 94; Cowasjee Patell's Chronology.

In the Saka year 1091, or A.D. 1168, the month of Srâvana was intercalary as recorded in an inscription of Vyaya Pandya Deva.<sup>•</sup> At that date the luni-solar year began on the 1st March, and the solar year on the 24th March. The 23rd March was, therefore, the 31st day of the solar month of Chaitra, and the 1st March was the 8th day of the solar Chaitra. Now, according to the native rule when the luni-solar year begins on the 6th, 7th or 8th of the solar month of Chaitra, then the month of Srâvana will be intercalary. Turning to my Table XVII, page 175, it will be seen that in the year A.D. 1168, or Saka 1091, the month of Srâvana was intercalary. That it was an intercalary year is proved absolutely by the initial date of the following year Saka 1092, which is 20 days later, and therefore the year 1091 just ended must have consisted of 13 lunar months.

But Jervis makes the year 1091 Saka a common year, and assigns the intercalary month of Srâvana to the year 1093 Saka. The Patell's year of intercalation are correct, and so also are his names of the intercalary months so far as I have had leisure to test them.

#### ALEXANDER CUNNINGHAM.

\* Pali, Sanskrit, and Old Kanarese inscriptions. By J. F. Fleet. No. 141.

### CONTENTS.

•

#### INDIAN ERAS.

.

		PREFACE INDIAN EBAS.				Page.
						•
-	B.C.	Ancient Indian modes of reckoning time	•••	•••	•••	1
	6777	Saptârshi-kâl, or Cycle of the Seven Rishis		•••	•••	10
	3128	BARHASPATYA-KAL, or 60-year Cycle of	-	•••	•••	18
111		, or 12-year Cycle of	Jupiter	•••	•••	26
IV	3102	KALI-YUGA, or beginning of the Kali age	•••	•••	•••	31
v	1177	Parasurâma Chakra, or Cycle of 1000 years	•••	•••		33
VI	543	NIRVANA of Buddha, or Buddhist Era	•••	•••		34
VII	527	NIRVANA of Mahâvira, or Jaina Era	•••	•••	•••	37
VIII	312	Era of the Seleukidæ		•••		38
IX	247	Era of Parthia	•••	•••	· <b></b>	46
х	57	VIKBAMA-Samvat				47
XI	24	Graha-parivrithi Chakra of 90 years	•••	•••		51
	A.D.					
XII	78	SAKA-BHUPA-KAL, or Era of the Saka K	ing	•••		<b>52</b>
XIII	166	GUPTA-KAL, or Gupta Era		•••		53
XIV	249	Chedi, or Kalachuri Samvat	•••			60
XV	319	Balabhi-kâl, or Era of Balabhi				63
XVI	607	Sri Harsha Era	•••			64
XVII	622	HIJRA, or Muhammadan Era		•••		66
XVIII	639	Burmese Common Era		•••		71
XIX	880	Newâr Era of Nepâl	•••			74
XX	1016	Châlukya Era	•••			75
XXI	1106	Lakshmana Sena Era of Bengal				76
XXII	1114	Siva Singha Samvat				81
XXIII	1556	Fasli Era of Bengal				82
XXIV		Ilahi Era of Akbar				83
XXV	1	CHRISTIAN Era				85
XXVI	-	Saura-Mâna, or Hindu Solar Calendar				88
XXVII		Chandra-Mâna, or Luni-Solar Calendar				90
* * * *					•••	

#### TABLES.

#### Christian Era.

No.	I	Week days for one year	•••	97
,,	11	Initial days of years-Julian Old Style reckoning	•••	98
,,	III	Initial days of years-Gregorian reckoning	•••	99
,,	IV	Number of days from 1st January to 31st December	•••	100

#### CONTENTS.

#### Scleukidan Era.

No.	v	Omitted days of the Macedonian Cycle of 19 ye	ears		101			
"	VI	Initial days of two Attic and two Macedonian	Cycles,	B.C. 340 to	311 102			
,,	VII	Initial days of Seleukidan years, B.C. 310 to A	.D. 222		103106			
Indian Eras.								
No.	VIII	Number of days in the Hindu solar year		•••	107			
"	IX	Initial dates of Hindu solar year		•••	108			
,,	х	Number of days in the Hindu luni-solar year		•••	109			
"	XI	Solar Ahargana of Aryabhatta		•••	110-11			
,,	XII	Solar Ahargana of Sûrya Siddhânta			112-13			
۰.	XIII	Luni-Solar Ahargana of Sûrya Siddhânta	•••	•••	114-15			
"	XIV	Number of days in Lunations	•••		116-17			
	Muhammadan Era.							
No.	xv	Number of days in the Hijra year	•••	•••	118			
"	XVI	Initial days of Hijra years	•••		119-134			
No.	XVII	General Table of corresponding dates, B.C. 60	to A.D.	1950	135			
"	XVIII	List of Eclipses		•••	204			
"	XIX	The Dakhini Cycle of Jupiter			224			
,,	XX	Initial days of Ilahi years	•••		225			
,,	XXI	The Abjad	•••		226			

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• •

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.

xiv

### ERRATA.

Page 7, line 22, for 'Kâli-Yuga,' read 'Kali-Yuga,' and the same correction in other places,

Page 25, No. 43, for ' Sanmya,' read 'Saumya.'

Page 42, line 2, for '165-164,' read '166-165.'

------, line 10, for ' 165-164,' read ' 166-165.'

\_\_\_\_\_, line 12. for ' 139-138,' read ' 140-139.'

-----, line 13, for '129-128,' read '130-129.'

Page 58. line 24, for 'any,' read 'my.'

Page 73. line 2, insert 'Guru,' after 'Dhamma.'

-----, line 19, for '1929' read '1029.'

Page 83, line 23, for 'Snnh,' read 'Sanh.'

Page 86, line 36, for 'of the year,' read 'to the year.'

Page 164, opposite A.D. 820, *insert*, in 1st and 3rd columns of Jupiter-Cycles, two black circles, to show that two names have been omitted.

Page 168, opposite A.D. 945, in column 3, for '23,' read '22.'

Page 169, opposite A.D. 972, in column of initial days, for 'Tu. 19,' read 'Mo. 18.'

\_\_\_\_\_, opposite A.D. 974, for ' Mo. 26 Feb.' read ' Th.'

Page 186, opposite A.D. 1496, for ' We. 16 Mar.' read 'Tu. 15.'

Page 224, line 2, should read " in which each year has a separate name."

#### N.B.-Page 45-add at foot :

If the correction of Kallippus of 1 day in 76 years had been adopted by the Seleukidæ, then the year 2 of their era would have begun on the 2nd October 312 B.O., and every succeeding 77th year would also have begun on the same day of the corresponding Christian year. Thus the following years of the Seleukidan era would all have begun on the 2nd October :--

163, An. Sel. 1, 77, 229. 305. 381, 457, 533. 609 In B.C. 312, 236, 160, 84, 8, A.D. 69, 145, 221, 297 The fact that the battle of Arbela was fought on the 2nd October 331 B.C., near the end of the month of Gorpizus, shows that the Macedonians of Alexauder's army had not adopted the corrected Calendar of Kallippus, otherwise the 2nd of October would have been the 1st of Hyperberetzeus.

#### N.B.-P. 95-add the following paragraph :--

When the given date falls in an intercalary year after the intercalary month, then 30 days must be added to the number of days given in Table X. Thus, if the given date should be 10th Mågha-sudi, and the year be an intercalary one, 30 days must be added to the number of 305 days given in the Table, unless the intercalary month should happen to be Phålguna, which being later in the year, would not affect the month of Mågha. :

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### BOOK

OF

## INDIAN ERAS.

#### ANCIENT INDIAN MODES OF RECKONING TIME.

THE natural divisions of time—years, months, and days—have, in all ages, been determined by the motions of the sun and moon. In India the day was reckoned from sunrise to sunrise; the month, from one moon to another moon; and the year, from the beginning of one season until its return.

The most ancient year probably consisted of 360 days, which approximated roughly to twelve revolutions of the moon and one of the sun. In one of the hymns of the Rig Veda the sun's annual course through the heavens is described as his *twelve-spoked wheel.*\* The 360 days, with as many nights, are called his 720 children. In another part of the same hymn the sun's annual course is somewhat differently described : "The felloes are 12, the wheel is 1, 3 are the axles : within it are collected 360 spokes."<sup>†</sup> Here the spokes represent the number of days; the axles are the three seasons of Heat, Rain, and Cold; and the 12 felloes are the 12 months.

But the great difference of 11 days between 12 lunations and 1 revolution of the sun must soon have led to the establishment of the old cycle of 5 solar years and 62 lunations. Taking the solar year at 365<sup>1</sup>/<sub>2</sub> days, and the moon's revolution at  $29\frac{1}{2}$  days, the 5 solar years would have been 1826<sup>1</sup>/<sub>4</sub> days, while the 62 lunations would have been 1829 days. The difference of  $2\frac{2}{4}$  days in the lustrum of 5 years would have made a yearly difference of upwards of half a day. The five years consisted of three ordinary years of 12 lunar months, and of two years, the 2nd and 5th, each with an intercalary, or thirteenth month.

\* So also in the Surya Siddhânta, xii, 19, Varâha Mihira speaks of the year as a 'wheel.' † Wilson's Rig Veda, II, 143; and also II, 131.

#### ANCIENT INDIAN MODES

This intercalary, or thirteenth month, is very plainly alluded to in the Rig Veda,\* where Varuna is said to know the 12 months, "and that which is supplementarily engendered," or, as Dr. Max Müller has it: "He knews the 12 months with their offspring, and knows the month which is produced in addition." +

Dr. Max Müller also notes that, "In the hymns of the Yajur Veda the 13th month is changed already into a deity. Oblations are offered (Vâjasan Sanhitâ, vii, 31) to each of the twelve months, and at the end one oblation is made to Anhasaspati, the deity of the intercalary month. In the Brâhmanas likewise the thirteenth month is mentioned, and in the Jyotisha the theory of intercalation is fully explained." It seems certain therefore that the intercalary month was well known as early as the Vedic Period.

Each year of this five-year cycle, or lustrum, had a separate name. This important fact was first made known by Colebrooke from the White Yajur Veda. The same names are also given by Varåha Mihira, who says: "The first year of each lustrum, called Samvatsara, is (ruled by) Agni; the second, Parivatsara, by the Sun; the third, Idávatsara, by the Moon; the fourth, Anuvatsara, by the Creator; and the last, Udavatsara, by Rudra." But the passage in the Yajur Veda goes on to say: "May mornings appertain to Thee, may days and nights, and fortnights, and months, and seasons, belong to Thee." Here then we see that, as early as the time of the Yajur Veda, the whole system of lunar months, with their light and dark fortnights, and of intercalary months, to adapt the lunar months to solar reckoning, had already been established.§

We have another testimony to the early use of the lunar fortnights in a passage of Quintus Curtius, whose information must have been obtained from some of the writers who accompanied Alexander the Great 11 "Their months consist of fifteen days; but they keep the

<sup>\*</sup> Wilson's Rig Veda, I, 65.

<sup>†</sup> History of Ancient Sanskrit Literature, p. 212.

<sup>†</sup> Dr. Kern's Translation of the Brihat Sanhita, C. viii, 24.

<sup>§</sup> Yújnavalkya also [C. ii, 6] says, that a petition made to the king should give the year, month, half-month, and day.

<sup>||</sup> Vita Alexandri, C. viii, 9: "Menses in quinos denos descripserunt dies: anni plena spatia servant. Lunz cursu notant tempora, non, ut plerique, cum orbem sidus implevit, sed cum se curvare cœpit in cornua."

full year. They reckon time by the course of the moon; not as most people do, but by half-moons."

We also learn the same thing from the inscriptions of Asoka, which are about eighty years later than Alexander. Thus in the separate edicts at Dhauli we find mention of the month of Tishya (*Måsi-cha Tise*), of the lunar fortnight (*athami pakhaye*, or the 8th day of the *paksha*), and of the three seasons (*tisu chatum-Måsisu*, or the three four-monthly periods). On three days the slaughter of animals also is forbidden, namely, on the day of 'fullmoon,' *punnamåsi* (called also *pannadasam*, or the 15th day), on the 14th day, and on the day after the conjunction.

The old year was divided into three seasons of Heat, Rain, and Cold, called Grishma, Varsha, and Hemanta,—all of which names are found in the Indo-Scythian inscriptions. They are also commonly known as  $Dh\hat{a}p$ -kâl, Barkha-kâl, Sût-kâl.\* So in Ceylon the rainy season, or Wasso, still consists of four months, and extends from July to November. In ancient times, however, Wasso or Varsha extended from June to October; but owing to the greater length of the Indian year the seasons fall back about one day and-a-half in every hundred years. At the present time the solar year begins on the 13th of April instead of on the 21st of March. In consequence of this difference the beginning of Varsha, or the rainy season, in the times of Alexander and Asoka, would have fallen just one month earlier than at present.

In the Indo-Scythian inscriptions from Mathura, the fortnights are not designated as light and dark, or the waxing and the waning of the moons, but are numbered throughout each season as the 1st, 2nd, 3rd, &c., fortnights of the hot, the rainy, or cold season. Thus one of Vasudeva's inscriptions is dated in

#### Sam. 83-Gr. 2-Di. 10

that is, Samvatsara 83, Grishma 2 Paksha, Divasa 10; or, "on the 10th day of the 2nd fortnight of Grishma in the year 83." But as the names of the Hindu months of Chaitra, Vaisâkha, Ashâdha, and Srâvana are found in the Indo-Scythian inscriptions from Gândhâra, along with the Macedonian names of Daisios, Apellaios, and Artemisios, during the reigns of Kanishka and Huvishka, it is difficult to say which of the

<sup>\*</sup> Abul Fazl, Gladwin's Translation of Ain-i-Akbari, I, 266, gives these three names, and significantly adds, "throughout Hindustan they do not reckon more than three seasons of the year."

#### ASCENT INDEAS MORE

two systems of naming the lanar formights may be the older. I have a suspicion, however, that the indigenous nonenclature may have been by numbering, and that the other method of waxing and waning fortnights may have been borrowed from the Greek paper or according paper officiency.

The oldest eras described by the astronomers are the Suphiruki-Kól, or cycle of the seven Rishis ; the Báriaspatys-Mánas, or sixty and twelve year cycles of Jupiter; and the Kali-Fuga, or beginning of the Kali-Age. Not one of these mounts up to the exaggerated periods of thousands of millions of years like the monstrous systems invented by the astronomers. The oldest of them, the Saptárski-Kál, ascends only to B.C. 4077, or perhaps to 5777 B.C., while the Birlespatys-Mins and the Kili-Yuga reach only a little beyond 3000 B.C. In Alexander's time the Hindus did not claim a greater antiquity than BC. 6777. I have therefore a very strong suspicion that the present extravagant system of Yagas and Maháyugas, Manwantaras, and Kalpas, was an invention of the astronomers, which they based on their newly-acquired knowledge of the presession. The problem was a simple one: Given the precession of 4278 seconds, as determined by Hipparehus, the period of one revolution through the whole circle of 360' would be 26,024,14 years. To obtain a whole number of years the fraction was got rid of in the usual way • by multiplying 26,024 by 166, and adding 16 to the product, a process which gives a period of exactly 4,320,000 years, or just one Yuga.

It may be objected that the Hindu astronomers did not adopt the precession of Hipparchus. But this will not alter the case, as their own determinations of the precession give precisely the same result. The precession fixed by Parasara is 46.5 seconds, and that of Aryabhata 46.2 seconds. Following the same process as before, we obtain for Parasara 27/870144 years as the period of one revolution, and 28,051144 years for Aryabhata, both of which periods give the same whole number of 4,320,000 years. Exactly the same result is also obtainable from the European precession of 501 seconds, which gives a period of 25,868147 years for one revolution, and a whole number of 4,320,000 years.

But if this be the true origin of the Hindu Yuga and the monstrous system of *Mahdyugas*, *Manwantaras*, and *Kalpas*, it follows that some other mode of reckoning must have been in use before the Christian era. Now the only early eras used in Northern India, of which detailed accounts still remain, are the cycle of the seven Rishis, the two cycles of Jupiter, and the Kâli-Yuga. The Saptârshi-Kâl is unknown in Southern India; but the Kâli-Yuga and the 60-year cycle of Jupiter are well known, besides the two cycles of Parasurâma and Grahaparivrithi, which are peculiar to Southern India. The eras of Buddha and Mahâvira, both of which are prior to Vikramâditya, must have been used by the Buddhists and the Jains at an early period. The former was certainly current amongst the Buddhists in the time of Asoka; and the latter was probably in use about the same period. In the Mathura inscriptions of the Indo-Scythian kings, which are found upon the statues of both Jains and Buddhists, the dates are invariably expressed in an era which may have originated with Kanishka, but which was most probably only an Indian adoption of the Seleukidan era as suggested by Mr. Thomas.

In dealing with Indian dates there is one fact that must never be forgotten, namely, that every year that is mentioned by number, that number refers to years actually elapsed, just as Europeans reckon their . ages. When a man says that he is 50 years old, he means literally that 50 full years have passed since his birth, and that he is then in his 51st year. So when a Hindu records the year 80 of the Vikrama Samvat, or any other era, he means that 80 full years of that era have actually elapsed, and that the current year is the 81st.

Only one inscription to my knowledge has yet been found dated in any of the intercalary months. This is no doubt due to the entire want of festivals in these months, and as grants of land are usually made on the festival days, there are of course few inscriptions recorded in the intercalary months.

### I.—SAPTÂRSHI-KÂL;

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#### CYCLE OF THE SEVEN RISHIS.

The Sapt-Rishi-Kdl, or "Cycle of the Seven Rishis," called also the Saptårshi and Sat Rikhi Kål, is so named after the seven stars of the constellation of the Great Bear. It is the only mode of reckoning employed in the Râja Tarangini, or History of Kashmir, and it is still used in the hill states to the south-east of Kashmir between the Chenâb on the west and the Jumna on the east. The general use of this cycle did not escape the notice of Abu Rihân, who has preserved much valuable information regarding the different centenary cycles in use at the time of Mahmud's invasion of India.

"In India," he says, "the vulgar reckon by ages, and these ages follow one after another. This they call the *Samvatsara* of a hundred. When one century is passed they drop it, and begin another. They call this the *Lok-Kål*, or 'People's Era.'" Now this last is the same name that is used by Kalhana Pandit of Kashmir, who says: †

> Lauhikebde chaturvinsate Sakakâlasya sumpratam. Saptatyâtyadhikam yâtam sahasram parivatsarah.

"The 24th year of the Laukika corresponds with the year 1070 of the Saka-Kâl."

From this statement we learn that the year 1 of the Laukika coincided with 1047 of the Saka, or A.D. 1025; and as the cycle was a centenary one, the first year of each century must have corresponded with the 25th year of each Christian century. This is placed beyond all doubt by the following facts:—

1.—In the Temple of Baijnâth, in the district of Mandi, there is an inscription which bears the two dates of Sake 726 and Lok-Kâl 80. Deducting 79 from each date we obtain the Sake year 647, or A.D. 725, as the first year of the Lok-Kâl century.

<sup>•</sup> Reinaud, Fragments Arabes et Persaus, p. 147.

<sup>†</sup> Râja Tarangini, I, 52.

#### CYCLE OF THE SEVEN RISHIS.

2.—Captain Patrick Gerard of the Gorkha Battalion, then stationed at Kotgarh on the Satlej, heads one of his notes as follows:—"Kacha Sambat, or year 2, or 1826-27, Kotgarh, June 25th, 1826." By this account the year 1825 A.D. was the first of the Kacha Sambat, or Sapt-Rishi-Kâl, of 100 years.

I first became acquainted with the survival of this mode of reckoning in 1846, when I was employed in the Kangra district. It was commonly called the Sat-Rikhi-Kâl, but was also well known as the Pahâri Samvat, or "Hill era." In the same year I obtained further information about it from Wazir Gusâun, the astute minister of the Mandi state, who accompanied me to Ladâk. From him I learned to read the dates on the Sati Pillars of the Mandi Rânis. Again, in 1859, on my return from Burma, I made new enquiries in Kashmir and Kângra, in Mandi and Kullu, as well as in Kotgarh and Râmpur on the Satlej. I then found that the Pandits of Kashmir still preserved the fanciful mode of reckoning the Lok-Kâl, which was invented by the astronomers, and afterwards adopted by Kalhana Pandit in the Râja Tarangini. All other accounts agree in making the Sapt Rishi cycle older than the Mahâbhârata. But the astronomers differ altogether from the common opinion which has been generally adopted throughout India. According to the almost universal belief of the people the period of the Great War, or the era of Yudhishthira, was also the beginning of the Kâli-Yuga. That this was also the popular belief in former days is proved by the explicit statement of Abul Fazl," that "In the beginning of the fourth or present Yuga, Râjâ Yudhishthira was universal monarch, and the commencement of his reign became the epoch of an era, of which to this time, being the fortieth year of the reign, there have elapsed 4696 years." Now the fortieth year of Akbar was A.D. 1595, which, deducted from 4696, gives B.C. 3101 as the period of Yudhishthira as well as of the Kali-Yuga. In another place also he states that the Mahâbhârata was " carried on in the latter end of the Dwapara-Yuga. And in a third place he says that the war happened one hundred and five years before the end of the Dwåpara-Yuga, and 4831<sup>+</sup> years before the fortieth year of Akbar. But Abul Fazl had also heard of the date invented by the astronomers, as near the close of his work he places the reign of Kansa, râjâ of Mathura, "above 4000 years before the fortieth of Akbar," that is between 2400 and 2500 B.C.

† This number should be 4801, or 4696 + 105, and not 4831.

<sup>\*</sup> Gladwin's Ain-i-Akbari, I, 263 : see also II, 88-91.

On one point all accounts agree—namely, "that the Munis (or Seven Rishis) were in Maghâ when king Yudhishthira reigned over the earth." <sup>\*</sup> But the popular belief assigns the same position of the Seven Rishis to be beginning of the Kâli-Yuga also.

According to the astronomers the era of Yudhishthira varied from 600 to 666 years after the beginning of the Kâli-Yuga. But their determinations depend on such groundless assumptions that they can only be looked upon as mere astronomical fancies. Both Parâsara and Aryabhata assume that the revolutions of the Seven Rishis began with the commencement of the Kalpa of 4,320.000,000 years; and that the number of their revolutions in this period was 1.599,998. But they differ slightly in the number of years elapsed before the beginning of the Kâli-Yuga, which the former makes 1,972.944,000, while the latter has 1,969.920,000. According to Parâsara—

As 4,320.000,000 : 1.972.944,000 :: 1.599,998 : 730,719.0866 or 10,000 : 4567

that is, at the beginning of the Kâli-Yuga the Seven Rishis had accomplished 730,719 complete revolutions plus .... 0866 of a revolution. Multiplying this fraction by 2,700 years, or one whole revolution, we get years 233.8200 of a revolution expired before Kâli-Yuga began. Then as the Great War took place when the Seven Rishis were in Maghâ (the 10th Nakshatra), we must deduct the 233.82 from 900, by which we obtain 666.18 years of Kâli-Yuga expired at the date of Yudhishthira.

By a similar process for Aryabhata, we get 662<sup>.4</sup> years of Kâli-Yuga expired as the date of Yudhishthira; and by repeating the process for Varâha Mihira, we get 653 Kâli-Yuga as his date of the Mahâbhârata. The last is the date adopted by Kalhana Pandit, who says: + "When 653 years of the Kâli-Yuga had expired, the Kurus and Pândavas flourished."

This fanciful date invented by the astronomers is noticed by Abu Rihân as the *Pându-Kâl*, or "era of the Pandus," which was different from the Kâli-Yuga; but he omits to mention its starting point.

The theory of the astronomers is in direct opposition to the explicit statements of the Purânas, which are in complete accord with the common belief.§ Thus the Vishnu Purâna says :--- "When the first two

\* Råja Tarangini, I, 56.
 † Råja Tarangni, I, 51.
 ‡ Reinaud, Fragments Arabes et Persaus, p. 187.
 § Vishnu Purana, IV, C. 24, or Hall's Edition, Vol. IV, p. 233.

#### CYCLE OF THE SEVEN RISHIS.

stars of the Seven Rishis (the Great Bear) rise in the heavens, and some lunar asterism is seen at night at an equal distance between them, then the Seven Rishis continue stationary, in the conjunction, for a hundred years of men. At the *birth of Parikshit* they were in *Maghå*; and the *Kåli-age then commenced*, which consists of 1200 (divine) years. When the portion of Vishnu (that had been born from Vasudeva) returned to heaven, then the Kåli-age commenced."\*

The Bhâgavata Purâna agrees with the Vishnu Purâna in placing the Seven Rishis in Maghâ at the time of the Great War. Thus Suka, addressing Parikshita, says: "Of the Seven Rishis, two are first perceived rising in the sky; and the asterism, which is observed to be at night even with the middle of those two stars, is that with which the Rishis are united, and they remain so during a hundred years of men. In your time, and at this moment, they are situated in Maghâ."

"When the splendour of Vishnu, named Krishna, departed for heaven, then did the Kâli-age, during which men delight in sin, invade the world. So long as he continued to touch the earth with his holy feet, so long the Kâli-age, comprising 1200 (divine) years, began." So also Nrisinha "expounds the Sâkalya Sanhita, and rejects Varâha's rule as disagreeing with the Purânas."<sup>+</sup>

Varâha himself quotes Vriddha Garga for his account of the cycle of the Seven Rishis.<sup>‡</sup> His words are: "1, 2. I shall tell, according to the theory of Vriddha Garga, the course of these Seven Seers, by whom the northern region is, as it were, protected; through whom she shines, as if adorned with a string of pearls, like a maiden with joyful countenance, wearing a wreath of white water-lilies; those Seven Seers, by the turning round of whom the northern region seems dancing, the pole-star being the regulator.

"3. The Seven Seers were in Maghå when king Yudhishthira ruled the earth, and the period of that king is 2526 years before the Saka era.

"4. They remain moving for a hundred years in each lunar mansion, and rise constantly in the north-east, together with Arundhati."

Wilson's Vishnn Purana by Hall.
 † Colebrooke's Essays, II, 313-14-15.
 ‡ Dr. Kern's Translation of the Brihat Sanhita, C. xiii, 1-4.

But unluckily for Varâha Mihira his commentator, Bhatta Utpala, has given us the very words of Garga, who simply says:\*

"At the junction of the Kali and Dwapara ages, the virtuous sages, who delight in protecting the people, stood at the asterism, over which the Pitris preside (that is Maghd)."

On comparing this quotation with Varåha's statement, we see at once that he has suppressed Garga's mention of the beginning of the Kåli-Yuga to suit his own astronomical fancies. Now Garga states most explicitly that the Seven Rishis were in Maghâ at the beginning of the Kâli-Yuga, and says nothing whatever about Yudhishthira. But the fact that the Rishis were in Maghâ at the time of the Great War was too well known to be altered, and so Varåha accepts this, while he quietly ignores Garga's statement about the Kâli-Yuga. Well might Nrisinha reject " the teaching of Varâha as differing from the Purânas."

The quotations which I have already given from Abu Rihân and Kalhana Pandit show that the fanciful vagaries of the astronomers regarding the date of the Mahâbhârata had already been partially adopted in the 11th and 12th Centuries A.D. But the learned Muhammadan author goes on to show that the use of the Sapt-Rishi cycle had certainly extended to Multan and Sindh.<sup>+</sup> He says, that "writers differ with regard to the beginning of the year as well as with regard to the initial point of the cycle." He states also that he has "seen the Indians, when they wished to mark the date of the taking of Somnåth, write down 242, 606, and 99, and then add them together, which gives the year of Saka. Abu Rihân explains that 242 shows the number of years (of Saka) which preceded the epoch when the Indians first began to use the centenary cycle, and that this usage commenced with the era of the Guptas. Further, that the sum of 606 shows the number of complete centenary cycles of 101 years each; and lastly, that 99 is the number of years elapsed of the current cycle." These numbers added together give 947 as the year of Saka in which Somnath was captured, equivalent to the year beginning in April A.D. 1025, and ending in April 1026, which is correct, as Somnath fell in January 1026.

In confirmation of the accuracy of this process Abu Rihân quotes the following formula from the astronomical tables of Durlabha of Multân:—"Set down 848 and add the Lok-Kâl or vulgar reckoning; the sum will show the year of the Saka era." Abu Rihân then gives

<sup>\*</sup> Colebrooke's Essays, II, 313. † Reinaud, Fragments Arabes et Persaus, p. 147.

the following example:—"Set down the actual date (year 953 of Saka in which he was writing) of Saka, and deduct 848, the remainder 105 will be the Lok-Kâl, and the year of the fall of Somnâth will be 98."

In the first example, the capture of Somnâth is assigned to the year 99 of the Lok-Kâl, and in the second example, to the year 98: but the latter is no doubt a mistake for 99.

As the Lok-Kâl of this description differs from that which has been in use for many centuries throughout Kashmir and all the hill states of the Punjâb and Cis-Sutlej districts, it appears to me either that the Lok-Kâl of Sindh and Multân must have had a different starting point from that of Kashmir, or that Abu Rihân must have been puzzled by conflicting accounts which he obtained from various persons who, perhaps, had but little knowledge of the subject. The latter, I conclude, to have been most probably the case, as Abu Rihân candidly acknowledges the imperfectness of his account, and warns the reader that the results which he gives are uncertain, as several of the numbers (of the centenary cycles) exceed 100.

The Lok-Kâl, or "common era," called also the Sapt-Rishi-Kâl, or "era of the Seven Rishis," is a cycle of 2700 years divided into twentyseven centenary periods, a new reckoning being started at the beginning of each century. The theory of the cycle is, that the Seven Rishis, or stars of Ursa Major, remain for one century in each of the twenty-seven Nakshatras, or lunar mansions. All authorities agree in making Aswini the first of the Nakshatras, and in stating that the Mahâbhârata took place when the Rishis were in the lunar constellation Maghâ, the tenth of the series. The Puranas, and the practice of all the people who still use this cycle, excepting only the Kashmiris, agree in making the era of Yudhishthira the same as the Kâli-Yuga. All, however, agree in stating that, at the time of the Mahâbhârata, the Seven Rishis had already passed 75 years in Maghâ. But as Varâha places the Great War 653 years after the beginning of the Kâli-Yuga, or in 2449 B.C., that year should have been the 76th of the tenth Nakshatra, and the 976th year of the cycle. This would fix the first year of each centenary period to the 25th year of each century B.C., and to the 76th year of each century A.D. But to prevent the confusion that would thus have arisen, Varaha simply ignored the generally accepted belief that the Rishis had spent 75 years in Magha when the Mahabharata took place and retained the initial points of the Saptarshi centuries-only bringing Magha down

from B.C. 3177 (or 3102 + 75) to B.C. 2477. Accordingly, Varâha's followers place the initial point of the Vrihaspati Chakra in 3377 B.C. in Aswini, so that each century begins in the 26th year of each century of the Kâli-Yuga exactly as Dr. Bühler was informed. This also accords with the statement of my Kashmiri informant that the Rishis had completed three revolutions less 25 years in the Dwâpara-Yuga before the Kâli-Yuga began; that is, their Chakra preceded the Kâli-Yuga by 275 years, equivalent to B.C. 3377, or 3102 + 275 years.

The following is a translation of the reply which I received from the Brahmans of Kangra in A.D. 1859 regarding the Sapt-Rishi-Kâl:— "At the beginning of the Kâli-Yuga, the Seven Rishis (or Stars of Ursa Major) had been 75 years in one Nakshatra (Maghâ), and they remained in the same for 25 years longer. These 25 years are the amount of difference between the total number of Kâli-Yuga years elapsed and the number of centuries or years of the Hill cycle [PahAri Samvat] up to the present date. Thus the present year, 1859 of the Christian era, is Kâli-Yuga 4960, and 35 of the 50th Hill cycle, or exactly 25 years short of the number of Kâli-Yuga years."

From another informant I received the following account :--- "The Seven Rishis remain for one hundred years in each Nakshatra. They entered into Maghâ 75 years before the beginning of the Kâli-Yuga, and they remained in Maghâ for 25 years of the Kâli-Yuga;" that is until 3077 B.C., when they entered into another Nakshatra.

Similar information was received from the Brahmans of Mandi and Bisahar. But from Kashmir the reply was somewhat different. It was obtained by Mirza Saifuddin after consultation with pandits and astronomers: "The present year 1859 is 4960 of the Kâli-Yuga, and Samvat 35 of the Haft Rikheshar. The Kâli-Yuga is said to be 25 years in advance of the Haft Rikheshar. The Seven stars complete one revolution in each Nakshatra in 100 years. When they had completed three revolutions less 25 years in the Dwâpara-Yuga, then the Kâli-Yuga began, and only 2425 years of the first Chakra belong to the Kâli-Yuga. Each whole period of 2700 years is called a *Chakra*, or cycle, in which the Seven Rishis pass through the 27 Nakshatras from Aswini to Revati. Of the second Chakra of 2700 years 25 Nakshatras were completed in the Christian year 1825, or 4926 Kâli-Yuga." This tallies exactly with the information lately obtained in Kashmir by Dr. Bühler, who writes : "I have found in the manuscript several more dates in the Saptrishi

#### CYCLE OF THE SEVEN RISHIS.

era with the thousands added, and all agree with the verse which places the beginning of the era in Kdli 26, Chaitra-sudi 1." In these accounts from Kashmir the computation of Varåha Mihira is adopted, which places the era of Yudhishthira in 653 of the Kâli-Yuga, when the Seven Rishis are said to have been in Maghâ, in direct opposition to the commonly received reckoning which places the era of Yudhishthira at the beginning of the Kâli-Yuga.

The informants in Kangra, Mandi, and Bisahar agreed with the Kashmir correspondent in fixing the beginning of the year at the *norâtra*, or new moon of Chaitra; that is Chaitra-sudi 1.

So universal is the belief that the date of the Kâli-Yuga is the same as that of the Mahâbhârata, that the native almanacs state it as a positive fact. Thus Professor Bhândârkar quotes the following from an ordinary Hindu Panchânga of Bombay: "In the Kâli-age there are six founders of eras. First, there was Yudhishthira in Indraprastha, whose era lasted for 3044 years. The second was Vikrama at Ujayani, whose era had a run of 135 years. The third was Salivâhana at Pratisthâna." Here the era of Yudhishthira is made the same as that of the Kâli-Yuga, which also dates from 3044 years before the era of Vikrama.

The first mention of the Lok-Kâl, or cycle of 100 years in the Râja Tarangini, is the year 89, corresponding with A.D. 813-14. Before this period only the lengths of reigns are given, but from A.D. 813 downwards the date of each king's death is carefully recorded, with the name and day of the month as well as the year of the cycle.

I have been thus particular in pointing out the true beginning of each century period of the Lok-Kâl or Sapt-Rishi Chakra in the year 25 of each Christian century, because both Troyer and Wilson, after translating correctly Kalhan's statement that the year 24 of the *Laukika* coincided with 1070 of the Saka (or A.D. 1148) have most deliberately and unaccountably thrown over the native historian's statement and adopted some fancied dates of their own. Thus the 89th year of the Kashmirian cycle, which, as we know from the Baijnâth inscription as well as from Kalhana himself, corresponded with A.D. 813, Troyer refers to A.D. 816, and this error of three years pervades all the dates throughout the first six books of his translation. So also Wilson's Chronology of Kashmir is throughout twenty-one years in advance of the true dates. How all this happened I cannot even guess, but can only repeat the old saying " aliquando bonus dormitat Homerus." The astronomers have been much puzzled to account for the alleged centennial motion of the Seven Rishis from one Nakshatra to another, which they admit is not visible to the human race. Thus the commentator Sridhara Swâmi explains, that "the two stars which rise first are Pulaha and Kratu; and whichever asterism is in a line south from the middle of those stars is that with which the Seven Rishis are united, and they so remain for one hundred years." Other explanations are cited by Colebrooke, who closes his account with the opinion of Kamalâkara, who observes, that "no such motion of the stars is perceptible. Remarking, however, that the authority of the *Purdnas* and *Sanhitds*, which affirm their revolution, is uncontrovertible, he reconciles faith and experience by saying, that the stars themselves are fixed; but the Seven Rishis are invisible deities, who perform the stated revolution in the period specified."\*

The mythologists, however, give a different explanation. According to them the Seven Rishis, having given offence to their teacher in the Satya-Yuga, were cursed by him and condemned to spend the remainder of their lives as antelopes, wandering from one Nakshatra to another every hundred years. Hence they were named the Sapta-Mriga, or "Seven Antelopes." This name recalls the Septem Triones of the Romans. Some say that the Rishis were doomed to take the shapes of different animals every hundred years.

But however obscure may be the origin of the cycle, there is no doubt about its antiquity, as both Varâha Mihira and Bhattotpala refer to the description of it given by Vriddha Garga, whose date is fixed by Dr. Kern to the first century B.C. By his account the cycle must have been in use bofore the beginning of the Kâli-Yuga, as he notes that the Seven Rishis had then passed 25 years in the Nakshatra or Lunar asterism of Maghâ. Then as Maghâ was the 10th of these asterisms, the beginning of that Chakra or cycle of 2700 years must be dated back by 975 years to B.C. 4077. But the genealogical lists of the Purânas point to a still earlier period, as they place Krishna in the 52nd generation after Brahmâ. Allowing twenty-five years to a generation the Hindu date of the creation would be thrown back by upwards of 1300 years before the Kâli-Yuga, or to B. C. 4400.

On referring to the accounts of ancient India handed down to us by Alexander's companions, I find a curious statement which seems to bear directly on this question of the starting point of Indian chronology.

<sup>\*</sup> See Colebrooke's Essays, II, 314 and 316.

#### CYCLE OF THE SEVEN RISHIS.

The statement is preserved by Pliny, Solinus, and Arrian. The first says, "Colliguntur à Libero Patre ad Alexandrum Magnum reges eorum CLIV, annis sex millia CCCCLI adjiciunt et menses tres,"—that is, "they reckon from Bacchus to Alexander the Great 154 kings, who reigned for 6451 years and 3 months." As Alexander entered the Panjâb in 326 B.C., and left it towards the end of the same year, this account fixes the starting point of Indian chronology to the year  $6451\frac{1}{4} + 326 = 6777$  B.C.

Now it is a curious coincidence that if another Saptårshi Chakra of 2700 years be added to 4077 B.C., or the beginning of the Chakra indicated by Vriddha Garga, the initial year will fall in 6777, the very year which was said by the Indians of Alexander's time to be the initial point of their history. This coincidence is certainly very remarkable, and as it is the result of the addition of such a large period as 2700 years, it would seem to point to the conclusion that so early as the time of Alexander the Saptårshi Chakra of 2700 years was the common mode of Indian reckoning. This indeed has already been inferred from the statement of Vriddha Garga himself.

The reckoning of the Lok-Kâl, as now used in Kashmir and the other hill states, is by the common luni-solar years beginning on Chaitrasudi 1, or the new moon of Chaitra. The cycle consists of 27 centuries, each counting from 1 to 100 years, when a new reckoning is begun. The first year of each century corresponds with the 25th year of each Christian century. According to Abu Rihân the people of Multân had only recently adopted the Kashmiri reckoning from Chaitra, while in Sindh and Kanauj they still reckoned the year from Mankhir (that is from Mârgasiras or Agrahayana).\*

For ascertaining any dates recorded in the Lok-Kâl the corresponding year of the Kâli-Yuga must be obtained from the General Table, and the calculation must be made according to the rules laid down for the luni-solar calendar. In the Râja Tarangini the years are always mentioned by their numbers, and so they are in the Baijnâth and Mandi inscriptions. But the name of the century, which should be that of the Nakshatra, is never given.

In Abu Rihân's account of the centenary cycle, there are several discordant numbers which I find it difficult to reconcile. He states that when the Indians wished to note the date of the taking of Somnâth[January 1026 A.D.], they set down the figures 242, 606, and 99, which added

<sup>\*</sup> Reinaud, Fragments Arabes et Persaus, p. 146.

together gave 947 of the Saka era [equivalent to A.D. 1025-26]. He explains the numbers by referring 242 to the number of years which had passed before the Indians began to use the centenary cycle, which came in with the era of the Guptas.\* In a previous passage, however, he makes this period only 241 years. The figure 606 indicates the number of complete centuries (counting 101 years to each century), and the last figure 99 represents the number of years elapsed (éconlees) of the current cycle. Now it seems to me that Abu Rihân has not properly understood the number 606, which I would explain as follows: The unit 6 seems to me to refer to the period which had elapsed between the establishment of the so-called Gupta era in A.D. 319, and the beginning of the centenary reckoning in A.D. 325. According to this explanation, the account will stand thus :—

A.D. 78-79, establishment of the Saka era.
241 years.
319 establishment of the so-called Gupta era.
6 interval.
325 beginning of the centenary cycle.
600 years elapsed.
925
99 years of current cycle elapsed.
1024-25 A,D

But as the 99th year is said to have elapsed (éconlee), the current year of the cycle would have been 100 and not 99. Accordingly, the year A.D. would have been 1025-26, which is correct, as the fall of Somnåth took place in January 1026.

The following table will be of use in showing at a glance the initial year of each century, as well as its Nakshatra or Lunar asterism according to the different reckonings of Vriddha Garga and the Purânas on one hand, and of Varâha and the later astronomers on the other. The numbers placed against the names of the asterisms show the number of each century, while the beginning of the *Chakra*, or complete cycle of 2,700, is indicated by the No. 1 placed against Aswini. Thus, on the left hand, it will be seen that the cycle of the commonly received account began in the years 6777, 4077, and 1377 B.C., and in 1325 A.D., while those of Varâha Mihira's reckoning began in 3377 and 677 B.C. By the former it will be seen that the Seven Rishis were in Maghâ between 3177 and 3077 B.C., that is in B.C. 3101 at the beginning of the Kâli-Yuga; while by the latter, they are placed in Maghâ just 653 years later, between B.C. 2477 and 2377, that is, in B.C. 2448.

<sup>\*</sup> Reinaud, Fragments Arabes et Persans, p. 146.

### CYCLE OF THE SEVEN RISHIS.

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	According to Vriddha Garga and the Puránas.		LOK APTARS ial years	According to Varŝha Mihira and the later Astronomers.				
		B. C.	B. C.	B.C.	<b>A</b> . D.			
1	Aswini	6777	4077	1377	1325	U. Ashadha		21
2	Bharani	6677	3977	1277	1425	Sravanâ		22
3	Krittikå	6577	3877	1177	1525	Dhanishthâ		23
4	Rohini	6477	3777	1077	1625	Satabhishâ		24
5	Mrigasiras	6377	3677	977	1725	P. Bhadrpadâ		25
6	Ardrå	6277	3577	877	1825	υ		26
7	Punarvasu	6177	3477	777	1925	Revati		27
8	Pushyä	6077	3377	677	2025	Aswini		1
9	Asleshâ	5977	3277	577	2125	Bharani		2
10	MAGHA	5877	3177	477	2225	Krittikâ		3
11	P. Phalguni	5777	3077	377	2325	Rohini		4
12	σ	5677	2977	277	2425	Mrigasiras		5
13	Hastâ	5577	2877	177	2525	Ardrâ		6
14	Chitrâ	5477	2777	B.C. 77	2625	Punarvasu		7
15	Swâti	5377	2677	A.D.25	2725	Pushyâ		8
16	Visâkbâ	5277	2577	125	2825	Asleshâ		9
17	Anurâdhs •	5177	2477	225	2925	MAGHA		10
18	Jyeshthâ	5077	2377	325	3025	P. Phalguni		11
19	Mulå	4977	2277	425	3125	υ. —		12
20	P. Ashâdha	4877	2177	525	3225	Hastâ		13
21	v	4777	2077	625	3325	Chitrâ		14
22	Sravanå	4677	1977	725	3425	Swâti		15
23	Dhanishthâ	4577	1877	825	3525			16
24	Satabhishâ	4477	1777	925	3625	Anurâdhâ		17
25	P. Bhadrpadá	4377	1677	1025	3725	Jyeshthâ		18
26	<b>υ.</b>	4277	1577	1125	3825	Mulâ		19
27	Revati	4177	1477	1225	3925	P. Ashâdha		20

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# II.—BÀRHASPATYA-MÀNA,

### 60-YEAR CYCLE OF JUPITER.

THE Bárhaspatya-Mána, or Cycle of Jupiter, is a period of sixty years, or five revolutions of the planet, each year of which has a different name. This era was considered by Warren to be "very ancient;" but James Prinsep, misled by Csoma de Körös and Bentley, thought it was a "comparatively recent introduction."<sup>†</sup> The former understood from the Tibetan authorities that the Vrihaspati Chakra was introduced *into India* about the year 965 A.D., a date which tallied very closely with Bentley's assumed epoch of Varàha Mihira in A.D. 966-67. Happily, Bentley's vagaries have long ago been set to rest, while Colebrooke's date of Varàha Mihira, the author of the Sùrya Siddhànta, has been satisfactorily established. As Varàha died in A.D. 587, his writings describing the Cycles of Jupiter must be referred to the middle of the Sixth Century A.D. But as he quotes Vriddha Garga as his authority,<sup>\*</sup>, the Jovian Cycle must have been in use before the Christian era.

There are three different modes of reckoning the cycle of sixty years, of which the oldest is certainly that preserved by Varaha Mihira, as the first year of the Kali-Yuga, by his account, is the twentyseventh year of the Jovian Cycle. The second is the reckoning of the Jyotishtava, which is clearly only a correction of Varaha Mihira's method, as it makes the first year of the cycle correspond with the first year of the Kâli-Yuga. Both of these reckonings have been in use in Northern India, where the necessary omission of every eightysixth year of the Jovian Cycle has always been preserved. The third method is the reckoning followed in the south of India, by which the Jovian year is considered exactly the same as the solar year, and the

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<sup>•</sup> Warren's Käla Sankälita, p. 199. † Prinsep's Useful Tables, p. 27. ‡ Davis in Asiatic Researches, III, p. 78.

names are taken in succession, without any correction for the difference between the period of one revolution of the sun and that of one-twelfth part of a revolution of Jupiter. By this mode of reckoning the actual Cycle of Jupiter is entirely lost sight of, and the sixty names become simply the appellations of as many solar years.

The Bârhaspatya-Mâna has been fortunate in finding two such capable expounders as Davis and Warren, to whose works I may refer for a complete exposition of the cycle. It will be sufficient here to note the rules for finding the years of the cycle according to the two slightly different modes of the Northern reckoning.

The Sûrya Siddhânta rule, as explained, is as follows :—Divide the expired years of the Kâli-Yuga by 86, add the quotient to the dividend; divide the sum by 60, and the quotient gives the number of cycles expired. Then, if the proposed year should fall less than 31 from the last expunged year of the Chakra, add 28 to the remainder; but if it should be more than 31, add only 27; and the remainder so increased will indicate the current year of the Chakra. Take the year 223 A.D. = 3324 Kâli-Yuga, as an example:

30th year of 57th cycle.

A reference to the general table will show that this result is correct, reckoning from Prabhava.

The rule followed in the second method is thus laid down in the Brihat Sanhita:\*

"Multiply the years expired since the era of the Saka King by 11 and the product by 4; add 8589; divide that sum by 3750. To the quotient add the Saka years; divide the sum by 60 (to find the cycles).

Taking the same year as before A.D. 223-78=145 Saka-

	145	4
×	11	+ 145
	1595	149
×	4	÷ 60 —-
		Cycles 2+29 years complete
	6380	or 30th year current as before.
+	8589	
3750 J	14969 (4	

• Dr. Kern's Translation of the Brihat Sanhita, c. viii, 20-21.

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Taking the same year as before A.D. 223 - 75 = 145 Saka.

Then 145 Saka	145 Saka
22	<del>1</del>
290	149
290	÷ 60
	Cycles 2 + 29 complete years,
3190	or 30th year current as before.
4291	-
÷ 1875 J 7481 (4	

In these last two methods the multiplying by 11 and then by 4 of the first is equivalent to multiplying by 44, which is exactly double the multiplier 22 of the second; just as the divisor 3750 of the first is double 1875 of the second. In other words,  $\frac{11 \times 4}{3759} = \frac{22}{1875}$ . There is a slight difference in the *Kshepa*, or addition, as the half of 8589 is 42944, or a little more than 4291. As James Prinsep has remarked, the factor  $\frac{22}{1875}$  " is equivalent to dividing by 85227, the period when a year is to be expunged by this system."

But the same result may be obtained by a further simplification of the process, as follows :--To the Saka date add 195, then divide the sum by 85, and add the quotient to the Saka year. Then divide by 60: the quotient will give the number of cycles expired, and the remainder the number of expired years of the current cycle. Thus taking the same year 145 Saka, the process is

145	145
+ 195	+ 4
85 J 340 L 4	149
	60
	Cycles 2 + 29 years expired.

By the Telinga reckoning of Southern India the cycle began twelve years before the Kâli-Yuga, the first year of which corresponds with *Pramatha*, the thirteenth year of the cycle. The rule for ascertaining the cycle year for any particular date is simply to divide the expired years of the Kali-Yuga by 60, and the quotient will give the number of expired years.

Take the same year A.D. 223 + 3161 = 3324 Kali-Yuga.  $\div 60 - -$ 

Cycles 55 + 24 years.

add 12 for the years before Pramatha, and the result is 36 years of the cycle expired, and the 37th year current as in the general table.

As the years of the 60-year Cycle of Jupiter are only occasionally mentioned in the inscriptions of Northern India, I have not thought it worth while to give the Jyotishtava reckoning in addition to that of the Sûrya Siddhânta. In fact, the difference between the two is never more . than one year, and that only between the two periods of omitted years. In the Second Century A.D., the omitted year of the Sûrya Siddhânta reckoning took place in 136, while that of the Jyotishtava was two years later-in 138. In A.D. 394, the omissions took place together. In A.D. 479 the Jyotishtava omitted year preceded that of the Sûrya Siddhânta by one year, but in the present Century the Jyotishtava omitted year, No. 48 in 1848, preceded the other, No. 1 of 1856, by thirteen years. The current years of the two cycles, however, generally correspond, excepting in the short periods between the two omissions, when they differ by only one year. The years 847 and 907 A.D. were initial years of cycles in all three modes of reckoning : and the numbers of all the years coincided from A.D. 825 (the 39th year) down to A.D. 909.

The Telinga computation, though useless as an astronomical cycle, is of great value in fixing the dates of inscriptions where the numerical figures are at all doubtful, or where the name of the era may be uncertain. Of the latter class there is a very curious example in an inscription translated by Dr. Hall.\* The record is dated "in the *Saka* year twelve hundred and seventy-five, called *Chitrabhanu*, in the light fortnight of *Margasirsha*, its fifth day, and Saturday." Now nothing can apparently be clearer than this date, which corresponds with A.D. 1353; and yet it is absolutely certain that the word 'Saka' cannot be intended for the *Saka* era,<sup>+</sup> as the name of *Chitrabhanu*, which is the 16th year of the Jovian Cycle, corresponds exactly with 1275 of the

<sup>\*</sup> Bengal Asiatic Society's Journal, XXVIII, pp. 4-5.

<sup>†</sup> I have since found an inscription dated in Vikrama Saka.

down to A.D. 1027, when the Cycle of Jupiter was introduced. The name was only a symbolical mode of reckoning the number 403: as  $m\delta$ , "fire" = 3; kha, "vacuity" = 0; gya-tsho, "ocean" = 4; or put together 403. It had therefore nothing to do with "the entrance of the infidels into Makha."

Csoma, in his Chronology, states, that the Baidurya Karpo was "written in the first year of the twelfth cycle, or A.D. 1687." This is correct, as the unit of each initial year of a cycle should be a 7. So also the period elapsed from the introduction of the Kâla-Chakra down to 1687 is said to be 660 years, which gives A.D. 1027 as the first year of the first cycle.

It is perhaps only accidental that the year 1027 is also the beginning of the 60-year cycle in Southern India. But the coincidence is curious. In China the cycle began in 1024 A.D., a fact which is proved by the numbers attached to the Tibetan names in the accompanying table, which shows that three years of the Chinese or Tibetan cycle names had already passed when the Indian cycle, commencing with Prabhava, began.

In my work on Ladåkh I have made the same mistake of one year as was done by Csoma himself. I stated correctly (p. 396) that the year A.D. 1851 was the 45th year of the 14th cycle; for, deducting 44 from 45 and from 1851, we get the first year = 1807. But in the list of initial years I have given A.D. 1026 down to 1806, instead of A.D. 627 to 1807, owing to my faith in Csoma's accuracy.

## 60-YEAR CYCLE OF JUPITER.

## BÂRHASPATYA-CHAKRA.

Names of the 60 years of the Jovian Cycle.

No.	SANSKRIT.	TIBETAN.	No.	No.	SANSKRIT.	TIBETAN.	N
1	Prabhava	Fire-hare	4	31	Hemalamba	Fire-bird	3
2	Vibhava	Earth-dragon	5	32	Vilambin	Earth-dog	3
3	Sukla	Earth-serpent	6	33	Vikârin	Earth-hog	3
4	Pramoda	Iron-horse	7	34	Sarvari	Iron-mouse	3
5	Prajâpati	Iron-sheep	8	35	Plava	Iron-ox	18
6	Angiras	Water-ape	9	36	Sobhakrit	Water-tiger	3
7	Sri Mukha	Water-bird	10	37	Subhakrit	Water-hare	4
8	Bhâva	Wood-dog	11	38	Krodhin	Wood-dragon	14
9	Yuvan	Wood-hog	12	39	Viswavasu	Wood-serpent	1
10	Dhatar	Fire-mouse	13	40	Parâbhava	Fire-horse	4
11	Iswara	Fire-ox	14	41	Plavanga	Fire-sheep	1
12	Bahudhânya	Earth-tiger	15	42	Kilaka	Earth-ape	4
13	Pramäthin	Earth-hare	16	43	Sanmya	Earth-bird	4
14	Vikrama	Iron-dragon	17	44	Sâdhârana	Iron-dog	4
15	Vrisha	Iron-serpent	18	-15	Radhakrit	Iron-hog	1
16	Chitrabhânu	Water-horse	19	46	Paridhâvin	Water-mouse	4
17	Subhânu	Water-sheep	20	47	Pramådin	Water-ox	1
18	Tárana	Wood-ape	21	48	Ananda	Wood-tiger	1
19	Parthiva	Wood-bird	22	49	Råkshasa	Wood-hare	1
20	Vyaya	Fire-dog	23	50	Anala	Fire-dragon	1
21	Sarvajit	Fire-hog	24	51	Pingala	Fire-serpent	1
22	Sarvadhârin	Earth-mouse	25	52	Kâlayútka	Earth-house	1
23	Virodhin	Earth-ox	26	53	Siddhårtha	Earth-sheep	E
24	Vikrita	Iron-tiger	27	54	Randra	Iron-ape	1
25	Khara	Iron-ape	28	55	Durmati	Iron-bird	1
26	Nandana	Water-dragon	29	56	Dundubhi	Water-dog	1
27	Vijaya	Water-serpent	30	57	Udgårin	Water-hog	1
28	Jaya	Wood-horse	31	58	Raktāksha	Wood-mouse	
29	Manmatha	Wood-sheep	32	59	Krodha	Wood-ox	
30	Durmukha	Fire-ape	33	60	Kshaya	Fire-tiger	

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# III.-BÂRHASPATYA-MÂNA,

#### OR

# 12-YEAR CYCLE OF JUPITER.

THE smaller Cycle of Jupiter consists of a period of twelve years, or one-fifth of the greater Cycle. It was described by Davis at some length, but is only briefly noticed by Warren.<sup>•</sup> I have already given a detailed account of this Cycle in my attempt to fix the initial point of the Gupta era.<sup>†</sup> Varâha Mihira notices it in the following terms : "Each year (during which Jupiter completes a twelfth part of his revolution) has to bear the name of the lunar mansion in which he rises. The years follow each other in the same order as the lunar months." They are also named after the lunar months with the prefix of the word 'Mahâ.' Thus Lalla says:

### Maghâ-oha Maghâyam yukta Maghâyam-oha Gururgada Mahâ-Mâgha.

"When both the Moon and Jupiter are in the asterism Maghâ, on the day of full moon of the month Mâgha, then the year is called Mahá-Mágha."

The statement of Varâha, quoted above, that the year has to bear the name of the mansion in which Jupiter rises requires some explanation. The twenty-seven Nakshatra, or lunar mansions, are divided into twelve groups, nine of which comprise two mansions only, and the remaining three each three mansions. One Nakshatra in each of these twelve groups gives its name to the luni-solar months, and consequently to the years of this cycle.

According to the rule for naming the several years of the 12-year Cycle of Jupiter, the year is called after the Nakshatra in which the planet rises heliacally. But in practice the names of the Jovian years

<sup>\*</sup> For the former, see Asiatic Researches, III, 217; and for the latter, the Kâla Sankâlita, p. 197.

<sup>†</sup> See Archæological Survey of India, Vol. X, Appendix.

are made to coincide with those of the luni-solar months. So that should the planet rise in Bharani the year is not called Bhârani, but Aswini, which is the name-giving Nakshatra of the group to which Bharani belongs.

Bhattotpala quotes Garga to the effect that 170 solar years being equal to 175 Jovian years, the two names of Aswayuja and Chaitra must be omitted.

This proportion was afterwards altered by Varâha, who made 172 years of Jupiter equal to  $170_{11}$  solar years, on which account two of Brihaspati's years are to be omitted in that period. His words are:

" Saptatyabda sate ekâdosa bhagaih panchabhira adhike gate Guru yukta Nakshatra mâsa samjna varsha dwayamâdkikam bhuvati."

Practically, every eighty-sixth name is expunged, and consequently the omissions are confined to six names out of the twelve; or, in other words, the omissions fall only on the alternate names in regular succession. Thus the six omitted names are Srâvana, Aswayuja, Mârgasiras, Mâgha, Chaitra, and Jyeshtha. The rule for finding the year of the 12-year cycle is only a slight extension of that for the 60-year cycle.

Rule.—Find the equivalent year of the Saka era, and multiply it by 22, then add 4291 to the product, and divide by 1875. Add the quotient without fractions to the Saka date, and divide the sum by 60. This quotient gives the number of expired cycles, and the remainder the number of expired years of the current cycle counting from Prabhava. To find the year of the 12-year cycle divide the last remainder by 12; the quotient will give the number of Jupiter's own revolutions completed, and the remainder will be the number of years expired of the current 12-year cycle, counting from Mahû-Srâvana as the first. The following example will show the working of the rules: Take A. D. 166 - 88 Saka.

<b>I</b> .	II.
$88 \times 22 = 1936$	31
+ 4291	12—
	Cycles 2+7 years completed,
÷ 1875 J 6227 L3	or the 8th year current, which
88	counted from Srâvana gives Jyesh-
_	tha, as in the General Table.
91	
÷ 60 —	
Cycle 1 + 31 years.	

27

But the same result may be obtained by the shorter process which I have proposed in my account of the 60-year cycle. Thus, to the Saka date add 195, then divide the sum by 85, and add the quotient to the Saka. Then divide by 60; the quotient will give the number of cycles expired, and the remainder the number of expired years of the current cycle. The above example will therefore be as follows :---

Saka 88  
+ 195  
----  
$$\div 85 \rfloor 283 (3 + 88 = 91)$$
  
 $\div 60---$   
1-31 as before.

Very few inscriptions have hitherto been discovered dated in the 12-year Cycle of Jupiter. But four of these, which are found coupled with the concurrent dates of the Gupta era, are of unusual importance from the aid which they may give in fixing the initial point of the Gupta era, which will be discussed hereafter. These four dates are found on the copperplate inscriptions of Raja Hastin and his son Sankshoba. They are as follows :--

Year	156	of Gupta	=	Mahâ	Vaisâkha.
,,	163	[read 173]	=	Mahâ	Aswayuja.
,,	191	•••	=	Mahâ	Chaitra.
,,	209	•••	_	Mahâ	Aswayuja.

Another inscription of the same family on a stone pillar gives the name of Mahâ Mâgha, but without any concurrent date.

Mr. Fleet has published\* two ancient inscriptions of the Kadamba Râjas of Banawâsi in the Dakhin, which are apparently dated in this 12-year cycle of Jupiter. Both inscriptions are of Raja Mrigesa, the earlier one being dated in the *year Pausha*, which is said to be the third year of his reign, and the later one in the year Vaisdkha, which is said to be the eighth year of his reign. From these two statements we learn that the third year of his reign must have begun in Mahâ Mârgasiras, as shown by the succession of the names of the years as follows:—

\* Archaelogical Survey of India, Vol. X, 126-27.

28

#### 12-YEAR CYCLE OF JUPITER.

Here unfortunately there is nothing to fix the date beyond the fact that between the years named Mahâ Pausha and Mahâ Vaisâkha there was no name omitted. But I think that something may perhaps be gained from the inscriptions to assist in finding an approximate date.

Sir Arthur Phayre has published a Burmese inscription from Pugân, which appears to me to be dated in the 12-year Cycle of Jupiter, as well as in the common era in use in Burma. It opens with the date thus: "In the era 551, the *Tharawan* year." Tharawan is the Burmese pronunciation of *Srávana*. But the year 551, or A.D. 1189, was Mahâ, Jyeshtha. If we might read 553, or A.D. 1191, then the year would correspond with the Indian year of Mahâ Srâvana.

I have quoted these examples from Banawâsi in the Dakhin, and Pugân in Burma, to show how widely spread was the use of the Cycles of Jupiter in ancient times.

The people of Tibet and Ladâk also make use of a cycle of twelve years for the computation of short periods, such as a person's age, or the date of any recent event. In this cycle each year is named after a different animal, as follows :---

	Tibetan.		1	Tibetan.	
1.	Byi-lo	Mouse-year	r. 7. 1	Fa-lo	 Horse-year.
2.	Lang-lo	Ox "	8. I	Lug-lo	 Sheep "
3.	Stag-lo	Tiger "	9. S	Spre-lo	 Ape "
4.	Zos-lo	Hare "	10. H	Bya-lo	 Bird "
5.	Brug-lo	Dragon "	11. K	Khyi-lo	 Dog "
6.	Brul-lo	Serpent "	12. I	Phog-lo	 Hog "

The only difficulty that I see about accepting the 12-year Jovian Cycle of Varâha for the five centuries which preceded him is the statement of Garga about the omission of Chaitra and Aswayuja, as if in his time they were the only years subject to retrenchment. But as Garga mentions that 172 of Jupiter's years were equal to 170 solar years, while Varâha makes them equal to  $170_{1T}^{5}$  solar years, the two cycles are practically the same in other respects. It does not, however, follow that no other years were subject to omission because Chaitra and Aswayuja alone are mentioned. My impression is, that the same six months that are omitted by Varâha's rule were also subject to omission in Garga's time. But even admitting that Chaitra and Aswayuja were the only two years that were expunged from the time of Garga down to Varâha Mihira, I see no difficulty in adjusting the times of omission so as to make them the only expunged years. As Chaitra and Aswayuja are also omitted years

in Varâha's scheme, they will of course remain constant, as the average period of omission is in both cases the 86th year. If then we accept the year 310 A. D. in which Chaitra was omitted as common to both systems, we have only to take the Aswayujas and Chaitras which fall nearest to the 85-year periods, either those preceding (A) or those following them (B), and the result will be the same excepting only as regards the names of the other omitted years. This will be seen at once by the following arrangement of the names :--

V	Varáha Mikira. Proposed Arrungements.					2		
<b>.</b> D.	Interval		<b>A.</b> D.	Interval	A	A. D.	Interval	B
310	85	Chaitra	310	177	Chaitra	310	89	Chaitra
395	85	Jyeshta	387	89	Aswayuja	399	89	Aswayuja
480	85	Srávana	476	· 89	Chaitra	488	π	Chaitra
<b>56</b> 3	85	Aswayuja	563	: <del>1</del> 7	Aswayuja	565	89	Aswayuja
650	85	Agrahayana	643	89	Chaitra	634	89	Chaitra
735	85	Mágha	731	89	Aswayuja	743	77	Aswayuja
820		Chaitra	820	I	Chaitra	830		Chaitra
÷ 6	510	years	÷ 6	510	years	÷ 6	510	years
lenn	85	interval	Mean	85	interval	Mean	85	interval

From this table it will be seen that a regular succession of Chaitras and Aswayujas might be omitted while still retaining a uniform mean period of eighty-five years. It will also be seen that at every third period the names of the omitted years, as well as the dates of omission, agree with those of Varâha Mihira.

# IV.—KÂLI-YUGA.

THE Kâli-Yuga, or fourth age of Hindu Chronology, dates from the year 3102 B.C.; the year 1, expired or completed, being B.C. 3101. The Four Yugas, or ages, which comprise one Mahâ-Yuga, consist of the following periods :---

	Years.	
Krita-Yuga	$1.728,000 \div 360 = 4800$ years of Gods.	
Treta-Yuga	$1.296,000 \div 360 = 3600$ "	
Dwâpara-Yuga	$$ 864,000 $\div$ 360 = 2400 "	
Kâli-Yuga	$$ 432,000 $\div$ 360 = 1200 "	
One Mahâ-Yuga	$$ 4.320,000 $\div$ 360 = 12000 years of Gods.	

Regarding the origin of the Mahâ-Yuga I have already expressed my opinion that it was the invention of the astronomers founded on the precession of the equinoxes. It may be objected that the division into four Yugas and their duration are mentioned both in the Code of Manu<sup>•</sup> and in the Mahâbhârata. But what is the age of Manu's Code ? The references to female heretics who wear an unlawful dress, or a dress unauthorized by the Vedas [v, 89, 90], of "female anchorets," or nuns [viii, 36, 37], and of "heretical books," or books of a false religion [ii, 11, and xi, 66], point so clearly to Buddhism. that the Code in its present form must certainly be posterior to the spread of Buddhism under Asoka.

The era of the Kâli-Yuga was in use down to the time of Varâha Mihira, who first introduced the use of the Saka era into Astronomical works. Aryabhata, who was not more than fifty years prior to him, still computed by the era of the Kâli-Yuga.<sup>†</sup> The initial point of the era seems to have been a traditional date of the period of the great war, which hal been handed down perhaps for ages. This date of 3102 B.C.

<sup>\*</sup> Mânava Sanhita, or Mânava Dharma-Sâstra, I, 67 et seq.

<sup>†</sup> Weber's History of Indian Literature, p. 260.

#### KALI-YUGA.

as the year 0 of the Kâli-Yuga was accepted by all; and from it the calculations of Aryabhata, and Varâha Mihira for the solar and luni-solar periods were computed.

Where the Kâli-Yuga era is used alone, the day of the month may be expressed either according to the solar calendar, or to the lunisolar one. Frequently the year is given in two different eras; one of which may be usually connected with the solar calendar and the other with the lunar. In the North of India the Kâli-Yuga and the Saka years are generally, but not always, connected with the solar reckoning, while in the South of India the Saka era is usually accompanied with the luni-solar reckoning. The Samvat of Vikramâditya is the only era that is exclusively luni-solar.

# V.-CYCLE OF PARASURÂMA.

THE era of Parasurâma is a cycle of 1000 years, which is said to have begun in B.C. 1175<sup>3</sup>/<sub>4</sub> complete, or 1176 B.C. current. It has been described by Warren in his Kâla Sankâlita,\* where he states that its use is confined to the Southern part of the Peninsula, called Malayâlam, comprising Malabâr and Travancore down to Cape Comorin. "The commencement of the year 977 of the 3rd cycle is said to have coincided with the 1st of (the solar month) Aswina of 1723 Saka, and the 14th September A.D. 1800." Here the Christian year is wrong, as it should be 1801, to agree with Saka 1723. According to Cowasjee Patell, the initial day of the year 977 was the 15th September 1801. The year is a solar one. This cycle is also called the Quilon or Kollam era. Dr. Burgess calls it the Kollam Andu era, and says that the last expired cycle began on the 25th August, A.D. 825.<sup>+</sup> Cowasjee Patell gives the 29th August of the same year. The initial dates of the different cycle are therefore

Ι	Cycle	•••	•••	•••	B.C.	1176
II	,,	•••	•••	•••	,,	176
ш	,,	•••	•••	•••	A.D.	825
1V	"	•••	•••	•••	"	1825

It is never used in Upper India, and indeed is scarcely known, except by name, even to the astronomers.

\* Kåla Sankålita, by Colonel Warren, p. 298.

† Indian Antiquary, 1882, p. 271.

# VI.-NIRVÂNA OF BUDDHA.

THE Nirvána, or death of the last Buddha Sâkya Muni, has been in use from a very early date down to the present day. According to the Buddhist Chronicles of Ceylon and Burma, the Nirvâna took place in 544 B.C. But as the inauguration of Asoka is referred to the year 218 after the Nirvâna, it seems probable that there must be an error in the date of the Nirvâna itself to the extent of sixty-six years, as the chronology of the reign of Asoka is now pretty well ascertained. His father's death took place in the year 214 of the Nirvâna, or B.C. 264, and his inauguration as king four years later, after he had prevailed over his brothers.

Only two inscriptions have yet been found which are dated in this era. The first is contained in the rock edicts of Asoka at Rupnâth and Sahsarâm. The second occurs in an inscribed slab which I found in the Temple of Surya in the city of Gaya. The date of Asoka's inscription is the year 256, or the 42nd year after the death of his father; his own reign being stated in the chronicles at 4 years + 37 years, or altogether 41 years complete, and 42 current. The second date is 1813 of the *Bhagavat Parinirvritte Samvat*, or Nirvâna, or Thursday the 1st of Kârtika-badi.

In Northern India the true date of the Nirvâna was lost at a very early period. Thus, in the time of Hwen Thsang, A. D. 630—645, the Buddhist schools held widely different opinions, varying from 900 and 1000 years up to 1200, 1300 and even 1500 years prior to that date,\* which would place the Nirvâna of Buddha either in 250, or 350, or 550 or 650 and 850 B.C. The same extravagant antiquity was also asserted in the time of FaHian, who places the Nirvâna during the reign of Ping-Wang, Emperor of China, in B.C. 770—719.† A similar antiquity was still claimed as late as the Twelfth Century A. D., during the reign of Asoka

<sup>\*</sup> Julien's Hwen Thsang, II, 335.

<sup>+</sup> Record of Buddhistic Kingdoms, translated by Giles, C. vii.

Balla Deva. Two of his inscriptions are dated in the years 51 and 74 of the Lakshmana Sena era, or in A. D. 1157 and 1180. A third inscription, which is dated in the year 1813 of the *Parinirvritte* of *Bhagavata*, shows that the time the Nirvâna was believed to have occurred, was about 656 to 633 B.C.

But these extravagant periods are disproved by Brahmanical as well as by Buddhist records, after making the necessary correction for the dates of Chandra Gupta and Asoka.

The following is the account given in the Brahmanical Puranas :---

VAYU PURAL	NA.	MATSYA PU	RANA.
Ajāta Satru, 25-8	= 17 years.	Ajâta Satru, 27 -	S = 19 years.
Harshaka	25 ,,	Vansaka	24 "
Udayâswa	33 "	Udásin	33 "
Nandi Vardhana	42 ,,	Nandi Vardhana	40 "
Mahanandi	43 "	Mahanandi	43 "
	160 "		159 "
Mahapadma + 9 Nanda	as 100 ,,	Mahapadma + 9 Nat	
Chandra Gupta	24 ,,	Chandra Gupta	24 ,
Bindusâra	28 "	Bindusâra	94 "
the second second second			
Accession of Asoka	312 years		or 311 years
and the second sec		na of Buddha.	1000000

Now the period stated in all the Buddhist records is 214 years, the difference of nearly 100 years, being in the reigns between Ajàta Satru and Chandra Gupta. In favour of the Buddhist records I may remark that Buddhaghosha, "the Brahman youth, born in the neighbourhood of the terrace of the Great Bo-tree, ... who had achieved the knowledge of the three Vedas,"\* must have been cognizant of the northern chronology when he translated the Singhalese Attha-katha, in which he has adopted the same dates as are found in the Mahawansa and Dipawansa. Admitting the correctness of this suggestion, it follows that Buddhaghosha either gave a preference to the Singhalese chronology, or that it did not differ from the northern chronology in his time, that is in A.D. 400. But whatever may be the true explanation of the difference, the fact remains that the Buddhists are unanimous in placing the Nirvâna of Buddha 214 years prior to the accession of Asoka. Accepting this as the most probable account of the interval, we obtain for the Nirvâna the corrected date of 264 + 214 = 478 B.C., instead of 544 B.C., being a difference of 66 years.

\* Mahawansa.

A novel theory has lately been put forward to account for the discrepancy by referring the Nirvâna to the time of Buddha's attainment of Buddhahood under the sacred tree. As this took place when he was 29 + 6 = 35 years old, the difference is only 80 - 35 = 45 years, instead of 66 years. Mr. Curter, who proposes this explanation, appears to think that Sákya obtained Buddhahood at 29 years of age. But he only left his home at that age, and had to sit for six years under the Bodhi tree at Uruvilwa before he attained Buddhahood.<sup>o</sup> The Buddhavansa (which he quotes) states vaguely that Gotama did not live to 100 years.

Mr. Curter's figures are-

Gotama's birth	•••	•••	•••	572 ]	<b>B.C.</b>
Nirvàna at 29th year	=	•••	•••	543	<b>,,</b>
Death according to the	Inscriptio	ns	•••	483	"

I must say that I remain quite unconvinced. The period that requires correction is not that between Buddha and Asoka, but the still later period of the impossible reigns of Mutasiwo and his sons for 162 years, or exactly 81 years to one generation. If the Buddhist dates of Chandra Gupta and Asoka can be corrected to the extent of 66 years, the date of Buddha's Nirvâna must be subject to the same correction, as the period between them does not seem to be capable of extension. On the contrary, the Northern Buddhists seem to have usually curtailed it to 100 years as stated by Hwen Thsang, as well as in the Asoka Avadâna.<sup>†</sup> A single northern work, the Avadâna Sataka, extends the period between the Nirvâna and Asoka to 200 years.

For these reasons I retain the year 544 B.C. as the accepted date of Buddha's Nirvâna, according to the Buddhist chronology of Ceylon and Burma. At the same time I think that there must certainly be an error in this date to the extent of about 66 years as shown by the subsequent dates of Chandra Gupta and Asoka.

\* Academy, 19th March 1881, and Indian Antiquary; May 1881, p. 153.

† See Burnouf.

36

# VII.—NIRVÂNA OF MAHÂVIRA.

no

THE Jains make use of an era dating from the Nirvána, or death of their last teacher Mahâvira. According to the Swetâmbara sect this event took place 470 years before Vikrama, or in B. C. 527. The Digambaras, however, make it 605 years before Vikrama. As the difference between the two dates is exactly 135 years, it seems probable that the Digambara date of 605 years before Vikrama should be altered to 605 years before Sâka, which would agree with that of the other sect. I have made many enquiries on this subject from learned Jains in Northern India, and the answer has been uniformly the same, "470 years before Vikramâditya." This also is the date given by the Jains of Gujarât.<sup>•</sup> The same date is used throughout the Theravali of Merutunga, who says: "Before the commencement of the reign of Vikrama, Sri Vera's Nirvâna took place 470 years."<sup>+</sup> Colonel Miles also, in his account of the Jainas of Gujarât and Mârwâr, uses the same date.<sup>‡</sup> Colonel Tod makes the era 477 years before Vikrama.

\* Dr. Stevenson's Kalpa Sutra. Preface, p. viii, and note, p. 96.

- † Dr. Bhau Dâji, Bombay Asiatic Society's Journal, IX, 149.
- ‡ Royal Asiatic Society's Transactions, III, 358.

### VIII.—ERA OF THE SELEUKIDÆ.

#### -reconcersor

THE initial point of the Seleukidan era has been fixed by Fynes Clinton to the 1st of October 312 B.C., in the beginning of Olympiad XVII, 1.\* According to Ulugh Beg this era began 12 years after the death of Alexander, and 340,700 days before the Hijra of Muhammad, 16th July A.D. 622. Now 311 complete years B.C. plus 621 complete years A.D. = 932 Julian years, contain 340,414 days, which deducted from 340,700 leave 286 days to be accounted for. As the Hijra era dates from 16th July there are 196 days in A.D. 622, which leave only 90 days prior to the beginning of B.C. 311; so that, according to Ulugh Beg, the Seleukidan era must have begun on the 3rd of October B.C. 312. The other datum of 12 years after the death of Alexander does not refer to the actual date of Alexander's death, but to the initial day of the 425th year of Nabonasar, 12th November 324 B.C., in which year Alexander died. Twelve years later places the beginning of the Seleukidan era near the end of the year 312 B.C.

This era dates from the defeat of Nikanor, the general of Antigonus, by Seleukus, who thus became master of Babylon in Olympiad XVII, I. The initial date of the era in B.C. 312 is also established by the dates on several coins, of which one of Hadrian bears the date HKY, and another of Caracalla bears the date of HK $\Phi$ . As Hadrian began to reign on the 11th August 117 A.D., and Caracalla on the 8th April 217 A.D., the first year of the era referred to must have included the dates of 8th April and 11th of August 311 B.C.<sup>+</sup>

The names of the months were the same as those of the Macedonian Calendar. But as the Seleukidan year began in October, the first month must have been Hyperberetæus. The order of the Macedonian months has been gathered by Clinton from Josephus and Suidas,

<sup>\*</sup> Fasti Hellenici, III, p. 311.

<sup>&</sup>lt;sup>†</sup> Ordo Szolorum, by Henry Browne, pp. 487 and 488. See also Fasti Hellenici, III, p. 373.

who compare them with the Hebrew and Roman months.\* Clinton gives an extract from Cardinal Norisius, who quotes Hieronymus to show that in Antioch and other Syrian cities the year began with Hyperberetæus :— "In quarto mense qui apud nos vocatur Januarius, apud Orientales enim populos, October erat primus mensis, et Januarius quartus Est (Shebat) in acerrimo hyemis, qui ab Ægyptüs Mechir, à Macedonibus  $\Pi_{e\rho truoc}$ , à Romanis Februarius appellatur." So also Corsini and Scaliger make Hyperberetæus the first month. The following are the names of the months with the corresponding months of the Jewish Calendar as found in Josephus and other authors—

1	MACEDONIAN.	HEBREW	ENGLISH.
1	Hyperberetæus	 Tisri	 October
2	Dius	 Marcheswan	 November
3	Apellæus	 Kisleu	 December
4	Audynæus	 Tebeth	 January
5	Peritius	 Shebat	 February
6	Dystrus	 Adar	 March
7	Xanthikus	 Nisan	 April
8	Artemisius	 Ijar	 May
9	Dæsius	 Swan	 June
10	Panemus	 Thamuz	 July
11	Löus	 Ab	 August
12	Gorpiæus	 Elul	 September

Now the Macedonian Calendar, like that of the Athenians, was a luni-solar cycle of 19 solar years, or 235 lunar months; and as more than a century had elapsed from the time of Meton when Seleukus established his era, there can be no reasonable doubt that the Metonic cycle was adopted in Syria. This is proved by the following facts:

1. "Whenever Macedonian months are compared with Attic or lunar months, it nowhere appears that they differ in their dimensions or contents.

2. "Seleukus Nikator, the founder of the kingdom of the Seleukidæ, gave order to affix the Macedonian names to the Syrian months, which were unquestionably lunar.

<sup>\*</sup> Clinton, Fasti Hellenici, III, p. 353.

<sup>†</sup> These proofs are taken from Browne's Ordo Sæclorum, p. 461.

#### ERA OF THE SELEUKIDÆ.

3. "Ptolemy, in his Almagest, gives the dates of various eclipses and occultations observed at Babylon between the years B.C. 721 and 229. The last three dates, B.C. 245, 237, 229, bear the names of Macedonian months, and by calculation prove that the Babylonians under the Seleukidæ measured time by lunar months with Macedonian names.

4. "The date on the Rosetta stone, IX Ptolemy Epiphanes, 18th Mechir = 4th of Macedonian Xanthikus, being reduced, proves the same thing."

These facts show most decisively that the Syro-Macedonian calendar of the Seleukidæ was luni-solar, and not solar, as is frequently stated.\* Thus James Prinsep, copying an article from the Companion to the Almanac for 1830, says :—"Their year was solar, and consisted of 365 days, with the addition of a day every fourth year." But the calendar of 365<sup>1</sup>/<sub>4</sub> days is the Julian calendar, which was not adopted in Syria until some time after the Christian era, when it had become a Roman province.

As the Syro-Macedonian months were lunar, there must have been seven intercalary months inserted at certain periods in each cycle of 19 years. According to the Greek cycle of Meton, these insertions took place in the 3rd, 5th, 8th, 11th, 13th, 16th, 19th years of the cycle. "The name of the old Macedonian intercalary month is inferred from 2 Maccabees, XI, 21, where the date of a manifesto issued by Lysias, General of Antiochus Eupator, is given as 24th  $\Delta \iota or \kappa op \iota v \theta \iota ov$ , but in the Vulgate  $24 \ Dioscori$ ; and from the Etymol<sup>m</sup> Mag<sup>m</sup> we learn, that  $\Delta \iota or \kappa op \iota v \theta \iota ov$ , but in the place of this intercalary month  $\Delta \iota or \kappa op \iota v \theta \iota ov$ , but is inferred that the place of this intercalary month  $\Delta \iota or \kappa op oc$  was the same as that of the Jewish month, *i.e.*, before Nisan."<sup>†</sup>

The introduction of the Julian reckoning must have been confined to Syria and the western provinces of the Seleukidan empire, which had been annexed to Rome. But in the Eastern provinces, which then formed the Parthian empire, the luni-solar reckoning still maintained its place. This is proved most conclusively by the following facts. It was the custom of the later Parthian kings to date all their large silver coins with the month and year of their issue. The names of all the twelve Macedonian months have thus been found on the coins of the Parthian

40

<sup>\*</sup> Cowasjee Patell, p. 26, of course copies Prinsep. † Ordo Sæclorum, p. 461.

#### ERA OF THE SELEUKIDÆ.

kings. There are a few slight differences, such as Xandikus for Xanthikus, and Soloiûs for Loüs. But on one coin of Vologeses III, I find the name of EMBOAI, which can only be that of the intercalary or *embolismic* month.\* This is accompanied with the date OY or 490, or A.D. 178-9, in which year there was an intercalary month according to my table. It is clear, therefore, that, up to this late period, the people of the Parthian empire still continued to use the luni-solar reckoning of the Macedonian Calendar.

I have been thus particular in describing the Syro-Macedonian Calendar of the Seleukidæ, as we know that it was in use in the northwest of India, during the period of Indo-Scythian rule, from which we may infer, with some certainty, that it must have been the common reckoning of their predecessors, the Bactrian Greeks. Mr. Thomas has already shown that this is highly probable; but nothing has yet been found to determine it absolutely.

In the Indo-Scythian inscriptions, the names of four different Macedonian months have been found,-namely, Panemos, Daisios, Apellaios, and Artemisios. The occurrence of these names shows incontestably that the Macedonian Calendar must have been introduced into Kabul and North-Western India by the Bactrian Greeks, and as the province to the west of the Indus had belonged to Seleukus, I conclude that the era of the Seleukidæ must have been adopted there also. Unfortunately, the year dates hitherto discovered are all small numbers, which might refer to some recently established era of the Indo-Scythians, or, as suggested by Mr. Thomas, they may possibly refer to the Seleukidan era by leaving out the hundreds, which was the common Indian mode of reckoning the year of the Saptarshi-kal. With the Indo-Scythian inscriptions, for instance, the dates of 9, 11, 18, and 28 of Kanishka. and of 33, 39, 47, and 51 of Huvishka, might either be referred to a new era, such as the Saka-kâl of 78 A.D., or to the years 9, 11, 18, &c., of the fifth Seleukidan century, by leaving out 400. In the former case, the year 9 of Kanishka would be 78 + 9 = 87 A.D., while in the latter case it would be referred to the year 409 of the Seleukidan era, equal to A.D. 97-98.

It is doubtful, except in a few instances, whether any coins of the Greek kings are dated. The three letters PMI on the exergue of the coin of Platon can only be explained as a date, although the usual order of IMP is reversed. As a date they represent 147, which can only be

<sup>\*</sup> This coin is engraved in Longperier's unpublished book on the Parthian coinage, Plate XIV, Fig. 9.

referred to the Seleukidan era, and would, therefore, be equivalent to B.C. 165-164. The letters OF, or 73, are found on a coin of Eukratides, and the letters IIF, or 83, on several coins of Heliokles. That these are most probably dates has been proved by Mr. Thomas, by a reference to a coin of Heliokles in the British Museum, bearing the full date PIIF, or 183.\* I have since acquired a tetradrachm of Eukratides with the detached letters NA, which may also be read as a date, or 51 = 151 of the Seleukidan era. According to these dates we have—

	-			An. Sel.	B. C.
Platon in	<i></i>	•••	•••	147 =	165-164.
Eukratides i	n	•••		51 or 151 -	161-160.
Ditto	•••	•••	•••	73 or 173 =	139-138.
<b>He</b> liokles	•••	•••	•••	183 -	129-128.

After this the dates on the Greek coins would seem to be, as Mr. Thomas suggests, only regnal years of the different kings.

Having accepted these dates—and I do not see how they can be disputed—I feel that the dates found in the Indo-Scythian inscriptions along with the names of the Macedonian months must also be referred to the Seleukidan era. I am quite prepared, therefore, to accept all the dates of the Indo-Scythian inscriptions from Kabul and Taxila and Mathura as belonging to the Seleukidan era, with the hundreds omitted after the Indian custom. This also would appear to be Mr. Thomas's conclusion, when he says : "The question thus arises whether this latter practice (of using the Macedonian names of the months) does not imply a continued use of the Seleukidan era, in association with which the names must first have reached India."

Under this view, the following will be the dates of the Indo-Scythian Princes Kanishka, Huvishka, and Vâsu Deva:

> A.D. 80 Kanishka, S. 9 = 409 - 312 = 97 A.D. S. 28 = 428 - 312 = 116 A.D. 120 Huvishka, S. 33 = 433 - 312 = 121 A.D. S. 51 = 451 - 312 = 139 A.D. 150 Vásu Deva, S. 87 = 487 - 312 = 175 A.D. S. 98 = 498 - 312 = 186 A.D.
> A.D. 190, close of Indo-Scythian rule in Northern India.

A.D. 190, close of Indo-Scythian rule in Northern India.

The accuracy of these dates is confirmed by the discovery of gold coins of Wema Kadphises, Kanishka and Huvishka in the Ahin-posh Stûpa, along with some Roman gold coins of Domitian, Trajan, and

42

<sup>\*</sup> Bactrian Coins and Indian Dates, in Royal Asiatic Society's Journal, New Series, Vol. IX, p. 3.

Sabina, the wife of Hadrian. Sabina died in A.D. 137, and as there was only one coin of Huvishka amongst twenty-one specimens, the Stûpa was probably built not later than 130 A.D.

Under these circumstances it appears to me that some account of the era of the Seleukidæ is absolutely necessary for any work treating of early Indian dates. I have therefore drawn up the accompanying tables of the initial days of all the years of the era from its commencement down to the close of the Parthian empire in the early part of the Third Century A.D. I have studied the accounts given by Clinton in his Fasti Hellenici, and by Browne in his Ordo Sæclorum, and I have examined most of their authorities in the original. I have also computed many of the test calculations for myself, some of which will be noticed presently.

The old Greek year consisted originally of 360 days, divided into 12 months of 30 days each. But as many of the Greek festivals depended on the moon, it was soon discovered that the true length of a mean lunation was about  $29\frac{1}{2}$  days, and that of a solar year about 365 days. Various methods were adopted from time to time for accommodating the computation by lunar months to the solar year. In the time of Perikles the *enneateris*, or cycle of 8 solar years, was in use. This consisted of 8 lunar years of 354 days each, with the addition of 3 intercalary months, in the 3rd, 5th, and 8th years, making a total of 99 lunations or lunar months. But as 8 solar years of  $365\frac{1}{4}$  days contain 2922 days, while 99 lunations of  $29\frac{1}{4}$  days amount to only  $2920\frac{1}{2}$  days, there was a deficiency of one day and-a-half in every cycle of 8 years.

To remedy this defect Meton proposed in B.C. 432 his famous cycle of 19 solar years of 3651 days each, which differs by only a small fraction from 235 lunations. Meton's value of the 19 solar years as 6940 days was a little in excess of the truth, as a year of 3651 days gives only 693975 days in 19 years. As this excess of 1 day amounted to a whole day in 76 years, Kallippus, in B.C. 330, introduced the cycle of 76 years, or four Metonic periods, from which he retrenched the extra day. But beyond this, according to Clinton, "he appears to have made no change in the ervea-kau-dekaernpic of Meton." It is supposed, from the account of Timocharis of the 36th and 47th years being anni communes, that he closed the 6th Metonic cycle at its 8th year, or B.C. 330, which, accordingly, became an annus communis as the 1st of the Kallippic cycle of 76 years, which could not have happened if the original Metonic cycle had not been interrupted. But Clinton quotes a marble which renders this arrangement doubtful. It is quite certain that it could not have been adopted in Syria, as we know that the year 148 of the Seleukidan

era, or B.C. 165-64, was intercalary,\* which is true of the Metonic cycle, but disagrees with that of Kallippus. As the Parthian coin of Vologases III shows the same accordance with the Metonic reckoning, there can be no doubt that the Kallippic correction had not been introduced into either Syria or Parthia. Clinton also deduces from "the three years described by Ptolemy as 67, 75, and 82 of the Chaldmans, commencing respectively October 15, October 16, and October 1, that the Macedonians must have received the cycle in the 9th year of a Metonic errea-car-Secaeropus, which would be the second of a Kallippic. For this reason I have adopted the Metonic cycle in the accompanying tables, which show the initial day of every year down to the close of the Parthian empire. I have numbered the Metonic cycles I, II, III, IV, &c., and should it be required to convert any date into the Kallippic reckoning, it is only necessary to throw back every date in each period of 76 years by one day; or, as the Kallippic correction was established in B.C. 330, to antedate by one day every initial day in the Metonic Cycles IV, V, VI VII; by two days those of Cycles VIII, IX, X, XI; by three days those of Cycles XII, XIII, XIV, XV; and so on, deducting one more day for every four Metonic cycles.

In the old cycle of 8 years the lunar months consisted nominally of 30 days each, one day being "omitted between the 20th and 30th of every alternate month. But in those months from which a day was deducted, the last day was still called *rpiaxàc*, and the day omitted was perhaps the 29th, or any other day but the 30th."<sup>+</sup> Meton also retained the nominal value of the month at 30 days, but he proposed a new scheme for the days to be omitted. As 235 lunations at 30 days each amounted to 7050 days, or 110 days in excess of the 6940 days assigned to 19 solar years, he devised the cumbrous and inconvenient plan of omitting every 63rd day throughout the cycle; but it is not known whether he included or excluded the seven intercalary months. These omitted days, or  $\bar{\eta}\mu \epsilon \rho a$ ,  $\bar{\epsilon} \epsilon a \rho \epsilon \sigma \mu \rho \sigma$ , are shown in the table, which is altered from Clinton's Attic tables to suit the Macedonian Calendar.

The seven intercalary months of the Metonic cycle were added at the end of the 3rd, 5th, 8th, 11th, 13th, 16th, and 19th years. But in the Macedonian Calendar the embolismic month was placed in the middle of the year immediately preceding Xanthikos.<sup>‡</sup> Clinton supposes that the embolismic months were also subject to the retrenchment of the 63rd

<sup>\*</sup> See 2 Maccabees, XI, p. 21. † Clinton, Fasti Hellenici, I, p. 336.

<sup>&</sup>lt;sup>‡</sup> Clinton, III, 353, quoting Macrobius, who states that the intercalations were placed at the end of February of Greeks as well as Romans.

### ERA OF THE SELEUKIDÆ.

day, should it happen to fall upon them. But this cannot have been the case, otherwise the number of omitted days would have amounted to 111.9, or nearly 2 in excess of the required number of 110. Meton's scheme consisted of a cycle of 19 years, each of 12 months of 30 days, with seven intercalary months also of 30 days, making altogether 7050 days, from which 110 days were to be deducted to obtain the required number of 6940 days, by omitting every 63rd day. Now if the embolismic months had been subject to curtailment, the number of omitted days would have been 112. But if they were not subject to these omissions, the required number of 6940 days would have been obtained by passing them over, and striking out the day from the following month. This arrangement is shown in Table VII, where the embolismic month of 30 days is placed in the middle of the year between Dustros and Xanthikus.

But there is another grave objection to Clinton's scheme, namely, that it would make all the last four months of the cycle full months of 30 days, and as the first two months of each cycle were necessarily full months, there would have been no less than six consecutive full months all lumped together. I look upon this result as quite fatal to his scheme.

Now, the arrangement which I propose, as shown in Table VII, is quite free from this defect, as it has not even a single instance of three full months coming together, and only one of three hollow or short months,—namely, in the last year of one cycle and first two years of the succeeding one. According to Clinton's scheme, if a new moon had fallen in the first day of the first of the six consecutive full months, a new moon would have occurred three whole days before the beginning of the seventh month. By my arrangement, the new moon would only differ one day and-a-half from the  $row\mu\eta\nu u$ .

To test the tables, I will take the date of the battle of Arbela, which took place on the twelfth day after an eclipse of the moon, the two armies having been drawn up facing each other on the eleventh night after the eclipse. Now the day of battle has been fixed to the 2nd of October B.C. 331 by the mention of this eclipse. The eclipse took place on the night of 20th of September at full moon, and the new moon which opened the next Macedonian year, must, therefore, have fallen on the 5th of October. According to my table, the new year's day fell on the 4th October. We know that the battle took place very near the end of the Macedonian month, as Aristander had foretold that "a battle would be fought in that very month."\* The 2nd of October was the 29th of Gorpizeus, or the last day but one of the month.

\* Arrian, Hist., Allexandri, III, 7.

## IX.-ERA OF PARTHIA.

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THE notice of a Parthian era was discovered<sup>®</sup> by George Smith amongst the cuneiform records at Babylon. Three Parthian tablets were obtained at Babylon itself, but only one of them was perfect. This gave a double date as follows :--

"Month ——— 23rd day, 144th year, which is called the 208th year, Arsakes, king of kings."

George Smith gives the year 248 B.C. as the first year of the Parthian era. But as the first year of the Seleukidan era did not begin until October 312 B.C. or 3111, only three months of the year 248 at the very utmost can be assigned to the first year of the Parthian era. But if, as is quite possible, the Parthian era did not begin until about the middle of the Seleukidan year, its initial point would have been in April 247 B.C., or even later, instead of in October 248, and it would not have ended until April 246 or later. Now Antiochus II Theos died in January 246,† and as Strabo, Appian, and Suidas, all agree in assigning the revolt of the Parthians to the period immediately following the death of Antiochus II, I think there is a very strong reason for adopting some middle month of the year 247 B.C. as the initial point of the Parthian era. I had already adopted the year 246 for the rise of Bactrian independence, on the testimony of the authors above quoted, in my account of the Coins of Alexander's successors in the East.<sup>+</sup> And as I have shown that the date of the death of Antiochus may easily have fallen within the first year of the Parthian era as now established by the cuneiform inscriptions, I think that the year 247 has a better claim to be considered the starting point of Parthian independence than the previous year 248.

<sup>\*</sup> Assyrian Discoveries, p. 389.

<sup>†</sup> Clinton, Fasti Hellenici, III, 350.

<sup>‡</sup> See Numismatic Chronicle, New Series, 1868, p. 257.

# X.---VIKRAMADITYA SAMVAT.

:00:-

THE Vikramâditya Samvat, or era of Vikramâditya, is reckoned from the vernal equinox of the year 57 B.C., and the completion of the Kâli-Yuga year 3044. It is used all over Northern India, except in Bengal, where the Saka era has been generally adopted. It is used also in Telingâna and Gujarât; but in the latter province the year does not begin until seven months later than in the north, or with the 1st of Kârtik-Sudi, which now falls during October, but which, at the beginning of the Christian era, fell between the middle of September and the middle of October.

This era is said to have been established by Vikramâditya, a king of Ujain, to commemorate his victory over the Sakas. The earliest date yet found in any inscription, with the name of Vikramâditya attached to it, is one of Raja Jâika, whose name is already well known from the Morbi inscription bearing the date of 585 of the Gupta era. In this new inscription the date, as read by Pandit Bhagwân Lâl, is thus expressed :

"In the Vikrama Samvatsara 94, in addition to 700, on the 30th day (*amdvdsyd*) of the dark half of the month of Kârtika, Sunday, in the afternoon (?) on the occasion of a solar eclipse."

The text of this inscription has now been published by Dr. Bühler, who gives the following translation of the date :\*

"When seven hundred years of Vikrama exceeded by ninety-four (in figures) 794 (*had passed*) in the second half of the month Kârtika, at the new moon, on a Sunday, under the constellation Jyeshthâ, on the occasion of an eclipse of the sun."

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<sup>\*</sup> Reinaud Fragments Drabes et Persans, pp. 145-146.

Now the last day of Kârtika in the Vikrama Samvat 794 was the 28th of October A.D. 737, which day was a Monday, and not a Sunday as stated in the inscription, and there was no eclipse on that date; Dr. Bühler, therefore, suggests that, as "the figure for the year probably refers, as usual in Indian dates, to completed years, the grant must have been issued at the end of Kârtika (in Gujarât the first month) of Vikrama Samvat 795." Now this is absolutely impossible. All Indian dates are given in completed years, and the Gujarât year of Vikrama Samvat 794 began on the 30th September 737 A.D., and ended on the 18th October 738. On this point there is no possibility of mistake, as the date is recorded in words as well as in figures. It is true that there was an eclipse of the sun on the 18th October 738, but that date, according to Hindu reckoning, was the last day of Aswina, and was a Saturday and not a Sunday. At present the Vikramâditya years begin with the 1st of Kârtika; but Abu Rihan mentions that in Sindh the year began with the following month of Mankhir, or Margasiras.\* Now, if this was the case in the neighbouring country of Gujarât, the month of Kârtika would have fallen in the end of the year 794; and if there had been no intercalary month, the last day of Kârtika would have been the actual eclipse day, 18th October 738 A.D. But, according to the usual reckoning, the month of Ashådha was intercalary in that year, so that the last day of Kârtika fell on the 16th of November. As it is quite clear that there must be a mistake somewhere, I think it probable that it may be in the name of the month; I would, therefore, propose to read Aswina 794 for Kârtika 794, which would agree with the real eclipse day of 18th October 738. But as that day was a Saturday. a very inauspicious day, the writing of the grant was probably made on the following day, or Sunday, which was the first day of Kartika, and this might have led to the substitution of the name of Kârtika for that of Aswina as the actual day of the eclipse.

But a very much earlier date, presumably of Vikramâditya, has been brought to notice by Dr. Bühler in one of the Gujarât inscriptions of Jayabhata, which, although no era is named, must also certainly be referred to the Vikramâditya Samvat<sup>†</sup> He reads the year as "Samvat 486, Sunday, the tenth day of the bright half of Ashâdha-Sudi, when the sun entered the sign of the Scorpion."

The Vikrama Samvat year 486 began in Gujarât, according to the present reckoning, on the 1st Kûrtika-Sudi, or 28th September A.D. 429,

<sup>\*</sup> Indian Antiquary, Vol. XII, p. 155. † Ibid, Vol. V, p. 114.

so that the 10th of Ashâdha-Sudi would have fallen in the following year, A.D. 430. As there was no intercalary month in that year, the 10th of Ashâdha-Sudi was the 99th day calculated from the 1st Chaitra-Sudi, or Tuesday, 11th March 430, which brings the date to Tuesday the 17th June, thus agreeing with the Tuesday already calculated by two Bombay authorities for Dr. Bühler. But as the day was a Sunday, according to the inscription, it seems to me not improbable that the date may not have been read quite correctly. The only year which I can find that agrees with the week day indicated is Vikrama Samvat 497, in which year the 10th of Ashâdha-Sudi fell on Sunday, the 15th June A.D. 441. If the figure for 80 was injured below, as the figure for 400 certainly was, then the decimal figure read as 80, might have been 90 and the Samvat year might, perhaps, be 497.

In the Jain books also there is very early mention of the Vikrama Samvat. Thus the Satrunjaya Mahâtmya professes to have been written 477 years after Vikrama, or in A.D. 420, when "Silâditya, king of Vallabhi, expelled the Buddhists from Saurashtra, recovered Satrunjaya and other places of pilgrimage from them, and erected many Jain temples."\* The era of Vikrama also is said to have been established by Vikramârka Raja 470 years after Mahâvira, or in 527 - 470 = 57 B.C. From the way in which he is spoken of as "honouring the advice of Siddha Sena Suri as the words of Jaina," it would appear that Vikramârka was a Jaina, which would account for the use of his era in the Jaina books, as well as for the non-mention of it in early Brahmanical inscriptions.

Most of our early writers, as Colebrooke, Wilford, Tod, and Jervis, have vitiated their chronology by placing the initial point of the Vikramâditya era in 56 B.C., instead of in 57 B.C., as shown by Prinsep.† The following examples from Colebrooke and Tod show how necessary it is to be strictly exact in dealing with dates :

1. In one of "Three grants of land found at Ujjayini," the recorded date is an eclipse of the moon in Srâvana of 1200 Samvat. Using the erroneous equation of 56, Colebrooke identifies this eclipse with that of the 16th July 1144 A.D.<sup>+</sup> But the true date was 1200 - 57 = 1143 A.D., in which year there was an eclipse of the moon on 28th July, which day was also the full moon of Srâvana.

<sup>\*</sup> Dr. Bhau Dâji, in Bombay Asiatic Society's Journal, Vol. VI, 29-30.

<sup>†</sup> See Prinsep's Useful Tables, p. 82, where the origin of the error is pointed out.

<sup>‡</sup> Colebrooke's Essays, Vol. II, p. 264.

#### VIKRAMADITYA SAMVAT.

2. But Tod's mistake is even more curious. He quotes the wellknown Balabhi inscription, which gives the month of Ashådha of the year 1320 of Vikrama along with the year 945 of the Balabhi era. He accordingly takes the year 375 [or 1320 - 945] of Vikrama as the initial point of the Balabhi era, from which, deducting 56, he obtains A.D. 319. Here his equation of 56 gives a true result, because he is dealing with an inscription from Gujarât, where the Vikrama year does not begin until 1st Kârtika-Sudi. In the same inscription the Hijra date is also given as 662. Now, as this year did not begin until the 4th November 1263, it is obvious that the Hindu month of Ashådha, or June-July, must belong to A.D. 1264, and not to A.D. 1263. We thus learn that the Vikrama Samvat year referred to in the inscription must have begun in October, as is still the practice in Gujarât, and that the year 1320 must be reckoned from 1st Kårtika-Sudi, or from October A.D. 1263 to October 1264, and not from March 1263 to March 1264. The equation for the Gujarât reckoning of the Vikrama Samvat is, therefore, 561, or, in round numbers, 56, which gives A.D. 1264 as the equivalent of the Vikrama Samvat 1320, as well as of the Hijra year 662. If the year of Vikrama had been reckoned from the last new moon preceding the vernal equinox, the date of the inscription would have been 1320 - 57 =1263 A.D., so that the month of Ashâdha (or June-July) would have fallen four months before the beginning of the Muhammadan year 662.

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### XI.—GRAHA-PARIVRITHI CYCLE.

THIS is a cycle of 90 years, which is in use only in Southern India. Warren has described it from the account of the Portuguese Missionary Beschi, who lived for forty years in Madura. It begins in the Kâli-Yuga 3078, or B.C. 24. As the second cycle would have fallen in A.D. 76, it seems probable that it may have some connection with the Jyotishi cycle of Jupiter, which dates from the same period.

# XII.—SÂKA ERA.

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THE Sáka-kál, called also Sáka-bhúpa-kál and Sákendra-kál, or the "era of the Saka King," is perhaps more widely used than any other era. Abu Rihân says that it was specially employed by the astronomers. But Aryabata and his predecessors would appear to have made use of the Kâli-Yuga for all their calculations, and it was Varâha Mihira who first made use of the Såka-kål in astronomical works. Abu Rihân, who correctly describes it as dating 135 years after Vikramåditya, says, that "Saka was the name of a king who reigned over the country situated between the Indus and the Sea; Vikramâditya marched against him and killed him in a battle fought near Korur, between Multan and the Fort of Luni." The town of Kahror still exists in the neighbourhood of Multân and Bahâwalpur. But this Vikramâditya, as Abu Rihân remarks, could not, owing to the long interval of 135 years, be the same as the famous prince who established the Vikrama Samvat. The name of the Saka king was Sâlivâhan, and accordingly the era is now very generally called Sâka Sâlivâhana. It is also known as the Sâka Samvat.

The reckoning of the Sâka era begins with the vernal equinox of the Kâli-Yuga year 3179, or A. D. 78. But as the Indians count only by completed years, the year 1 begins with the vernal equinox of Kâli-Yuga 3180, or A. D. 79. In Northern and Southern India it is usually employed along with the luni-solar calendar; but in Bengal it is generally used with the solar calendar.

In converting Sâka dates into Christian reckoning, 78 years must be added to the given date; and *vice versa* to convert Christian dates into Sâka reckoning, 78 years must be deducted from the former.

### XIII.—GUPTA ERA.

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THE Gupta-kâl, or Gupta era, is not mentioned by any native writer, although it is found in several ancient inscriptions, as well as on the coins of the Gupta kings. It is however noticed by Abu Rihân, who makes the singular mistake of dating it from the epoch of their extermination, and of confounding it with the era of Balabhi. Now the initial point of the Balabhi era is known absolutely from Colonel Tod's inscription, which makes the year 1 = 319 A.D., which is precisely the same date that is assigned to it by Abu Rihân, who says, that it is posterior to Sâka by 241 years, or 241 + 78 = 319 A.D. But as he goes on to say "Apparemment Ballaba suivit immediatement les Guptas," it is clear that the Guptas must have reigned *before* A.D. 319.

The confusion about the two eras has probably arisen from the fact that the Balabhi kings, in all their copper-plate grants, continued to use the Gupta era instead of making use of the Balabhi era itself. The following dates of the Gupta-kâl are found on the coins and inscriptions of the Gupta kings and in the records of their contemporaries :

1.	SAMUDRA-GUPTA		Copper-plate, S. 40.
2.	CHANDRA-GUPTA	•••	Inscriptions, S. 82-93.
3.	KUMABA-GUPTA		Inscription, S. 96-98-126.
4.	Skanda-Gupta		{ Inscriptions, S. 137-138-141-146. { Coins, S. 144-145-149.
5.	BUDHA-GUPTA		Inscriptions, S. 165. Coins, 174-180 odd.
6.	Raja Habtin	•••	8. 156-and year Mahâ Vaisâkha. {8. 163 (read 173) year Mahâ Aswayuja. 8. 191 Mahâ Chaitra.
7.	RAJA SANKSHOBA	•••	S. 209 Mahâ Aswayuja.

The last four dates, which are recorded in two different reckonings, I have already made use of in my attempt to fix the initial point of the Gupta-kâl.\* The title of mahâ, prefixed to the names of the four years, shows that the reckoning belongs to the Lesser Bârhaspatya Chakra, or

<sup>\*</sup> Archæological Survey of India, Vol. X, Appendix.

12-year Cycle of Jupiter. This cycle I have already described; and as the General Table gives all the names of the years in due order, marking each period of the omission of a name by a black circle, it will be easy to follow the arrangement by a reference to the Tables.

As the 12th part of one revolution of Jupiter is considerably more than four days less than one solar year, a difference which amounts to one whole year in a little more than 85 solar years, the rule is to omit every 86th name. Now the double dates which I have given above show that, from the year 156 to 209 of the Gupta era, there was no name of the Jovian Cycle omitted. As this fact seemed to me to offer a ready means of obtaining an approximate date for the beginning of the Guptakâl, I drew up a Table showing the names of all the years of the 12-year cycle from the beginning of the Christian era down to the present day. Now as there was no omitted name between the years 156 and 209 of the Gupta era, or for a period of 54 years, the first date of Mahå Vaisâkha, or Gupta-kâl 156, must lie within the period of 32 years (86 - 54) succeeding one of the omitted names. On referring to the General Table, where the names of the years of the 12-year cycle are all given, it will be seen that the date of 156 Gupta-kâl must, therefore, lie within some one of the following periods :

> 1.—A.D. 225 to 257, or 225 + 32. 2.—A.D. 310 to 342, or 310 + 32. 3.—A.D. 395 to 427, or 395 + 32.

In the first period the only dates on which Mahâ Vaisâkha falls are three, namely, A.D. 227, 239, 251. But as these dates would place the beginning of the Gupta era in A.D. 73, 81, or 95, they may be given up as too early.

In the second period the dates of Mahâ Vaisâkha are A.D. 310, 322, 334. If 310 be taken as 156 of the Gupta-kâl, then the year 1 will fall in 310 - 155 = 155 A.D. This would place the date of Budha Gupta's Pillar in 154 + 165 = 319 A.D., but as the week day of 12th Ashâdha-Sudi in Budha Gupta's inscription fell on a Tuesday in that year, and not on a *Thursday* as required, that date must be given up.\*

If the middle number 322 be taken as 156 of the Gupta-kâl, then the year 1 will fall in 322 - 155 = 167 A.D., and the date of Budha Gupta's Pillar in 166 + 165 = 331 A.D., in which year the 12th of Ashâdha-Sudi did fall on a *Thursday*.

<sup>\*</sup> Budha Gupta's inscription on the Pillar at Eran bears the date of Samvat 165, Thursday, 12th Ashâdha-Sudi.

If the third number 334 be taken as 156 of the Gupta-kâl, then the year 1 will fall in 334-155 = 179 A.D., and the year 165 of Budha Gupta's Pillar in A.D. 178+165 = 343, in which year the 12th Ashâdha-Sudi fell an a *Monday*.

In the group of 85 years from A.D. 310 to 395, there is therefore only one year, A.D. 322, that will satisfy the two requirements of being a Mahâ Vaisâkha year itself, and of having a *Thursday* as the week day answering to 12th Ashâdha-Sudi of the year 165 of the Gupta era.

In the second group of 85 years from A.D. 395 to 480, the only dates on which Mahâ Vaisâkha falls within the limit of 54 years preceding 480, are the two years 405 and 417 A.D., from which, deducting 155, we get the years 250 and 262 as two new starting points for the Gupta era.

First, taking 250 as the year 1 of the Gupta-kâl, the year 165 will be A.D. 414, in which year the 12th of Ashâdha-Sudi fell on a Tuesday, and not on a Thursday.

Next, taking 262 as the year 1 of the Gupta era, the year 165 will fall in A.D. 414, in which year the 12th of Ashâdha-Sudi fell on a Thursday, as required.

We have thus in the two groups of years, extending from A.D. 310 to 395, only two dates which fulfil the two conditions of the Mahâ Vaisâkha year, and the 12th of Ashâdha-Sudi being a Thursday. These two dates place the 1st year of the Gupta-kâl either in A.D. 167, or in A.D. 262.

It is needless to try a third group of years, as the only possible Mahâ Vaisâkha dates would fall in A.D. 488 and 500, which would place the 1st year of the Gupta era in A.D. 333 or 345, both of which are certainly too late.

When I submitted these results to my learned friend Pandit Bâpu Deva, he pointed out that the 12th of Ashâdha-Sudi in A.D. 331 was a Friday, and not a Thursday. But it is so only by the reckoning of the Surya Siddhânta, which I have purposely rejected in dealing with these Gupta dates, as Varâha Mihira, the author of the Surya Siddhânta, lived at least two centuries later than Budha Gupta; so that it is quite impossible that his corrected tables could have been used in computing

the calendar of the Gupta period. My calculations have been made from the tables of Aryabhatta, according to which the 12th of Ashâdha-Sudi in A.D. 331 was actually a Thursday. I am of course aware that Aryabhatta is also later than Budha Gupta; but as his length of year differs from that of his predecessor Parâsara by little more than half a second, the adoption of Aryabhatta's table will not affect the week day. The case is different with Varâha Mihira, as his year is considerably longer than that of Parâsara and Aryabhatta. This difference was duly noticed by James Prinsep, who remarks that "Warren's Kâla Sankâlita gives the beginning of the Hindu solar year invariably one day earlier than the reckoning followed in the tables of the Sudder Dewânee. This arises from his using the Tamil year of the Arya Siddhânta, while the Surya Siddhânta is used in Bengal."

In A.D. 331, the Hindu luni-solar year began on the 23rd February, according to Cowasjee Patell, who, throughout his chronology, has used the tables of Aryabhatta. In this year the month of Bhâdrapada was intercalary; but as this month is later than Ashâdha, the date will not be affected by the intercalation. Now the 12th of Ashâdha-Sudi is the 101st day of the Hindu luni-solar year; and as the 23rd of February was a Tuesday, the 101st day was a Thursday in A.D. 331, according to Aryabhatta's tables. But according to Varâha Mihira, the Hindu lunisolar year began one day later, on the 24th February, and consequently the 101st day would be Friday, 4th June.

The result of this examination is that there are only two possible dates for the commencement of the Gupta era, which fulfill the conditions of the two tests which I have applied,—namely, A.D. 167 and A.D. 262. We have accordingly to choose between these two dates that which agrees best with some of the other conditions.

By the first date, the period of Samudra Gupta, the son of Chandra Gupta I, the presumed founder of the era, would fall between the year 200 and 230 A.D., which agrees with the fact that he was a contemporary of the Devaputra Shâhi, Shahân Shâhi, or the king of the Great Yue-chi Indo-Scythians.

By this earlier period also the date of Dhrûva-bhatta would fall in 166+447=613 A.D., or just 28 years before Hwen Thsang's visit to Balabhi in 641, during his reign.

Taking the later date of A.D. 262, the period of Samudra Gupta would fall about A.D. 290 to 330, which would place him some considerable time after the Great Yue-chi had already got rid of their kings and had established military chiefs (? Satraps).

This later period also would fix the date of Dhrava-bhatta in 261 + 447 = 708 A.D., or just 68 years after Hwen Thsang's visit, which is much too long a period for the reign of a single king.

For these reasons I much prefer the earlier date of A.D. 167 as the first year of the Gupta era. This earlier date also is attended by a curious coincidence, which seems to me to offer a very strong confirmation of its accuracy. This is the correspondence in time of the death of Skanda Gupta with the foundation of the Balabhi era. His latest inscription is dated in S. 146, or A.D. 312, according to the earlier initial point which I have adopted. But one of his silver coins in my cabinet is dated three years later, or in S. 149, or A.D. 315, which is within four years of the establishment of the Balabhi era. I think it very probable, therefore, that the foundation of this era may have been brought about by the opportunity of Skanda Gupta's death. This would agree very well with the statement of Abu Rihân, "that the fall of the Guptas corresponded with the establishment of the Balabhi era."\*

In my attempt to fix the date of the Gupta era I overlooked a very important inscription of Silâditya V., the father of Dhrûva-bhatta of Balabhi. This inscription is dated in S. 441, while the son's inscription is only six years later. Supposing its dates to be recorded in the Gupta era, then Silâditya V. would have been reigning in 166 + 441 = 607 A. D., and his death may be placed about A.D. 610, or three years before the date of his son's inscription in S. 447, or A.D. 613. Now Silâditya V. was the tenth generation of the Balabhi kings, and if we place the foundation of the Balabhi monarchy in A.D. 319, the ten generations will have reigned from A.D. 318 to 610, or for 292 years, which gives an average of 291 years to each generation. During this period there were 18 reigns, which give an average of nearly 161 years to each reign.

That the era used by the Balabhi kings was that of the Guptas seems to be almost certain, as the Senapati Bhatâraka, the founder of the Balabhi dynasty, is said to have been the governor of Surâshtra during the last two years of Skanda Gupta's reign. If then we accept the

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<sup>\*</sup> See Archæological Survey of India, Vol. X, p. 125.

year A.D. 319 as the date of the foundation of the Balabhi monarchy. as well as of Balabhi itself, the Gupta era must be placed at least 146 years earlier, or in A.D. 173, according to the date of Skanda Gupta's latest inscription; or 149 years earlier, or in A.D. 170, according to the date of his latest coin. This direct succession of the Guptas by the Balabhis, already noted by Abu Rihân, is confirmed by the traditions of the people, which state that, on Skanda Gupta's death, the Senapati "assumed the title of king of Suråshtra," and "founded the city of Valabhinagar.". From these statements I gather that the Valabhi era must almost certainly be dated from the foundation of the city of Valabhi, which followed immediately after the death of Skanda Gupta. For this reason, therefore, I think that the date of A.D. 166, which I have already deduced for the beginning of the Gupta era, from the copper-plate inscriptions of Raja Hastin and his son Sankshoba, compared with the week day date of Budha Gupta's Pillar at Eran, has a better claim for acceptance than any other that has yet been proposed.

The new inscription of Jaika (which has not yet been published) has induced Dr. Bühler to fix the beginning of the Gupta era about A.D. 206-209. But even the earlier date of 206 would place Silâditya V. in 206+441=647 A.D., just six years later than the visit of Hwen Thsang, who found his son Dhrûva-bhatta on the throne.

This inscription of Dhrûva-bhatta I had previously overlooked until my attention was drawn to it by Dr. Burgess.

It tells altogether in favour of any earlier date, for the inscription of Dhrûva-bhatta himself is dated in 447, or only six years later than that of his father.

As the latest possible date for Silâditya V. is 640 A.D. (the year before Hwen Thsang's visit), the latest possible starting point for the Gupta era is 640-446=194 A.D.

According to my present calculation of the initial point of the Gupta era in A.D. 166=0, and 167=1, the date of Silâditya V. will fall in 441+166=607 A.D., and that of his son Dhrûva-bhatta in 447+166=613, A.D.

The published inscription of Jaika, from Morbi, is dated in the year 585 of the Gupta-kâl, or era of the Guptas. It records a grant made

<sup>\*</sup> Indian Antiquary, 1873, p. 312. Notes by Major Watson.

on the occasion of a solar eclipse; but the inscription itself is dated on the 5th of Phâlguna-Sudi, which was not therefore the date of the grant, as a solar eclipse can only happen on *badi* 14th or the last day of the waning moon. According to my calculation of the initial point of the Gupta era, the year 585 will correspond with 585+166 = 751 A.D., in which year there was an eclipse of the sun on the 25th of August.

It is true that this date is about five months earlier than the actual date of the record. But this is not a difficulty of any consequence, as we have a similar interval between the actual date of a grant and the date of its record on copper in the Râjim inscription of Tivara Deva, king of Kosala. His grant was made on the 12th of the solar month of Jyeshta, but was not recorded until the 8th of Kârtika, or just four days less than five months later. The day of the month I have read myself, as it is not given by Wilson in his Translation, see Asiatic Researches, Vol. XV. The eighth day of Kârtik is recorded both in words and in figures.

# XIV.-CHEDI, OR KALÂCHURI-SAMVAT.

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THERE is a considerable number of inscriptions of the Kalâchuri Rajas of Chedi, with various dates from S. 792 to S. 934, which, from the style of their characters, as well as from the names of other kings mentioned in them, cannot possibly be referred to the era of Vikrama. The actual name of the era was discovered by Mr. Beglar in several inscriptions from the district of Raypur to the east of Någpur. In some it is named the Chedi-Samvat, and in others the Kaláchuri-All the then available dates have been discussed in my Samvat. account of the Kalâchuri inscriptions.\* From these I deduced that the initial point of the era must have been A.D. 249, "as that year gives the correct week days by computation for four of the recorded dates." Since then I have been able to correct two of the discrepant dates noticed in my account, while I have myself found two new dates. As all of these give the correct week day when calculated from the initial point of 249 A.D. = 0, and 250 = 1, I feel satisfied that this is the true starting point of the Chedi era.

During my late tour in the Central Provinces I obtained the two new inscriptions of the Kalâchuri or Chedi-Samvat already mentioned. The date of the earlier one is given as Samvat 866, Mârga-Sudi 9, Ravau, or "Sunday the 9th of the waxing moon of Mârga, 866." Taking my previously ascertained starting point of the era in A.D. 250 = 1, the date will be 866 + 249 = A.D. 1115, in which year Jyeshta was intercalary, and the 9th of Mârga-Sudi fell on a Sunday.

The date of the second inscription is Samvat 934, Kårttika-Sudi 5, Budhe, or "Wednesday the 5th of the waxing moon of Kårttika in the year 934." Adding 249 to 934 we get the year A.D. 1183, in which the 15th of Kårttika-Sudi was a Wednesday.

<sup>\*</sup> Archæological Survey of India, IX, 112, et ante.

One of the discrepant dates, noted in my previous account, was that of the Benares inscription of Karna Deva, which I gave as "Samvat 793, Phâlgun-Badi 9th Monday." But as the 9th of Phâlgun-Badi in 793 + 249 = A.D. 1142 was a Sunday, I have come to the conclusion that I may perhaps have misread 793 for 792.

This conclusion was suggested to me by the fact that Wilford read the unit as 2, and that the 9th of Phâlguna-Badi in the preceding year, or 792 + 249 = A.D. 1141, was actually a Monday.

The other correction is in the day of the month in the year 898, which I read as Aswina-Sudi 7, instead of Aswina-Sudi 2, which a fresh examination has shown it to be. As the 7th was a Saturday (as noted in my previous account), the 2nd was of course a Monday, as stated in the inscription. We have thus got no less than eight dates, all of which agree in placing the initial point of the Chedi or Kalâchuri era in A.D. 249—the year 250 being reckoned as 1.

There are three inscriptions which give the name of "Kaláchuri-Samvat," dated respectively in 896, 898, and 910, but the first two only name the week day. Two other inscriptions, dated in 919 and 933, give the name of "Chedi-Samvat," but they do not give the week days.

The initial point of the Chedi or Kalâchuri-Samvat is therefore satisfactorily established by the eight following inscriptions, in which the calculated week days agree exactly with the recorded ones :--

INSCRIPTION.		Chedi S.	A. D.	•
Benares	••••	792	1041	Phâlgun-Badi 9, Monday.
Någpur museum	•••	866	1115	Mårga-Sudi 9, Sunday.
Rajim	•••	896	1145	Mågha-Sudi 8, Wednesday.
Seorinârâyan	•••	898	1147	Aswina-Sudi 2, Monday.
Tewar	•••	902	1151	Ashâdha-Sudi 1, Sunday.
Bhera-Ghất	•••	907	1156	Mârgasiras-Sudi, Sunday.
Bhera-Ghât	•••	928	1177	Mâgha-Badi 10, Monday.
Sahaspur	•••	934	1183	Kârttika-Sudi 5, Wednesday.

I must mention, however, that there are two other inscriptions in which the calculated week day differs by one day from that recorded. These are—

Bharhut	•••	909	1158	Srâvana-Sudi 5, Wednesday, comes out
Tewar	•••	928		Thursday. Sråvana-Sudi 6, Sunday, comes out Monday.

The Rajas of Chedi are mentioned in the inscriptions of the neighbouring kings from A.D. 520 downwards. But the earliest Prince mentioned in their own inscriptions is Kokalla I., the contemporary of Bhoja of Kanauj, whose dates we know to have ranged from A.D. 875 to 900. From his time down to the close of the dynasty, the Kalâchuri Princes played a principal part in the history of Central India. Their capital was at Tripura, now Tewar, six miles to the west of Jabalpur. But there was an eastern branch of the family which ruled at Ratanpur, of whom very little is at present known. A list of the Rajas of this family is given in the Gazetteer of the Central Provinces. Some of the names correspond with those found in the inscriptions; but the dates are all wrong, as they have been referred to the Samvat of Vikramâditya, instead of to the local Chedi era of the country.

# XV.—ERA OF BALABHI.

THE initial point of the Balabhi-kâl, or era of Balabhi, is fixed by the account of Abu Rihân, as well as by the other dates recorded in Tod's inscription, to the year 319 A.D. According to the former, it was 241 years posterior to the Sâka, or 78 + 241 = 319 A.D. According to the inscription, Sunday the 13th Ashâdha-Badi of the year 945 of *Srimad Balabhi*, fell in the year 662 of *Muhammad*, 1320 of *Vikrama*, and 151 of the Siva Singha Samvat.\* The first year of the Balabhi era was fixed by Tod by deducting 975 from 1320, which gives 375 of the Vikrama Samvat as the year 1 of the Balabhi Samvat. Then, deducting 56 from 375, he obtained 319 A.D. as the equivalent in the Christian era.

Now the difference between the Christian and the Vikrama starting points being nearly 57 years, the equivalent for Vikrama 375 should be 318, and not 319. But as we know from Abu Rihân that the Balabhi era actually began in 319, some explanation is required to show how Tod's erroneous factor of 56 gave the right year A.D. The explanation is a very simple one,-namely, that the Vikramâditya years in the province of Gujarât, where the inscription was found, began then, as they do now, with the month of Kartika or October, and consequently the true factor for converting the Vikrama date into the Christian equivalent was 561, or 56 as used by Tod. The proof of this is equally simple. The Hijra year 662 did not begin until the 4th of November 1263 A.D. This being the case, the month of Ashadha (or June-July) of the Christian year 1263 had already passed by, and therefore the Ashadha of Samvat 1320 of the Northern reckoning cannot belong to that year. But if we take the Southern reckoning prevalent in Gujarât, then 56 will become the nearest factor, and Tod's 375-56 will give the correct year A.D. 319. Then deducting 56 from the given Samvat year 1320, we get A.D. 1264 as the concurrent Christian year. This agrees exactly with the given year of Muhammad, 662, which began on 4th November 1263, and ended on the 23rd October 1264.

So far as I am aware Tod's inscription is the only one that has yet been found dated in the Balabhi era.

\* Tod's Rajasthan, I, 801.

## XVI.—SRI-HARSHA ERA.

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THE Sri-Harsha-kâl, or "Era of Sri-Harsha," is mentioned only by Abu Rihân. Its initial point shows that it was established by the famous king Sri Harsha Vardhana of Kanauj, from the 1st year of his reign. It was used in Mathura and Kanauj, and Abu Rihân gives its initial point from the Almanacs of Kashmir as 664 years posterior to Vikramâditya, or 664-57 = 607 A.D.\* I brought to notice some years ago one inscription of Bhoja Deva of Kanauj, which is certainly dated in this era. This inscription is at Prithudaka, or Pehoa, and is dated both in words and in figures in the year 276. Referring this to the era of Sri-Harsha we get 606+276 = 882 A.D.+

But the inscriptions found in Nepâl by Pandit Bhagwân Lâl offer still earlier instances of the use of this era.<sup>‡</sup> The earliest of these records, bearing the name of Ansu Varma, are dated in Samvat 34, 39, and 45. Now Ansu Varma was on the throne when the Chinese prilgrim Hwen Thsang visited Nepâl in A.D. 637, which was in the very middle of his reign, as his earliest inscription above quoted is dated in A.D. 640 (606+34) and his latest in A.D. 651, which was near the close of his reign, as an inscription of his successor, Jishnu Gupta, is dated in S. 48, or A.D. 654. Three inscriptions of Siva Deva are dated respectively in S. 119, 143, 145, and one of Jaya Deva in S. 153, or A.D. 759. Now Jaya Deva's mother is said to have been the grand-daughter of the "Great Aditya Sena, the illustrious lord of Magadha," of whom I have an inscription dated in S. 55, as I read the two figures. This would place Aditya in A.D. 661, or 64 years prior to his grand-daughter, the wife of Siva Deva.

<sup>\*</sup> Renaud, Fragments Arabes et Persaus, p. 139.

<sup>&</sup>lt;sup>†</sup> See Archæological Survey, X, 101, for other inscriptions of Bhoja Deva; Gwalior A.D. 876; and Deogarh A.D. 862. The Raja Tarangini also places him between 883 and 901 A.D.

<sup>‡</sup> Indian Antiquary, Vol. IX, p. 169, et seq.

### SRI-HARSHA ERA.

In A.D. 880 the Newâr era was introduced into Nepâl by Râghaba Deva. He is the sixth Prince in the Nepâl list after Jaya Deva; and if Jaya reigned until about 170 of the Harsha era, or A.D. 776, there would remain only 104 years to be divided over the five intervening reigns.

None of the inscriptions describe the era by name, but call it simply Samvat. But, from the mention of Ansu Varma as the reigning king of Nepâl by Hwen Thsang, it is quite clear that the dates which I have quoted must belong to the Sri-Harsha era. According to the lists Ansu had one predecessor Siva Deva Varma, who, as he belonged to the old family that had been expelled, was very probably restored by the powerful king of Kanauj, whose era he ad opted.

There are two copper-plate inscriptions of the family of the Kanauj kings, who reigned from about 750 to 1,000 A.D. The earlier plate is of Mahendra Pâla Deva, the son of Bhoja Deva, whose date I have fixed from several other inscriptions as extending from A.D. 870 to 900. The date of Mahendra's plate may be read as 315, which, referred to the Sri-Harsha era, would place him in A.D. 921. The later plate is of Sri Vinayaka Pâla Deva, the grandson of Mahendra Pâla. Its date seems to be 386, which would place him in A.D. 992.\* Shortly after this, Kanauj was conquered by the Râthors, who introduced the Samvat of Vikramâditya.

\* For the first plate, see Bengal Asiatic Society's Journal, XXXIII, 321, and for the wood plate, see the same Journal, XVII, 71.

# XVII.—HIJRA ERA.

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THIS era dates from the morning after the flight (*Hijra*) of Muhammad from Mekka to Medina, which took place on the night of the 15th July A.D. 622. The year 1, therefore, began on *Friday*, 16th July 622. The year is a simple lunar one of 12 lunations or lunar months, of 30 and 29 days alternately. The common year, therefore, consists of only 354 days. But as a month of  $29\frac{1}{2}$  days is somewhat less than one mean lunation, an intercalary day is added to the last month in the 2nd, 5th, 7th, 10th, 13th, 16th, 18th, 21st, 24th, 26th, and 29th years of each period of 30 years, so that the year consists of  $354\frac{11}{30}$  days, which makes the mean lunation  $29\frac{19}{360}$  days, or  $29\cdot5305555$ . This differs from the mean synodical revolution of European astronomers by only '0009332 of a day. The Muhammadan lunar year of  $354\frac{11}{30}$ , or  $354\cdot3666$  days, is, therefore, 0.970202 of the solar year of  $365\cdot25$  days of the Julian reckoning.

To find whether any given year is intercalary, divide it by 30, and if the remainder be either 2, 5, 7, 10, 13, 16, 18, 21, 24, 26, or 29, then the year is an intercalary one of 355 days; but if it be any other number, the year is a common one of 354 days.

But to save the trouble of calculation for finding on what day of the Christian era any particular Hijra date falls, I have prepared two tables, by which the corresponding date can be obtained in a much shorter time by inspection.

Thus, to find the corresponding date of Timur's capture of Delhi, which he has himself recorded as "Wednesday the 8th of the 2nd Rabi 801 A. H.," first look in Table XVI for the initial day of the Muhammadan year in Christian reckoning, which was Friday the 13th September 1398. Then turn to Table XV, and look for the place of II Rabi 8, from which run the eye upwards to the horizontal line of week

### HIJRA ERA.

days, beginning with Friday, where the intersection will be found to fall on Wednesday, thus agreeing with the week day given by Timur. Next look to the Roman numerals on the right, where it will be seen that "II Rabi 8" was the 6th day of the 13th week, or the 97th day of the Muhammadan year. Then calculate from the 13th September 1398 as the 1st day as follows:—

			Total		97	days,	
,,	December	 			18	"	
	November	 			30	37	
27	October	 			31	,,	
In	September	 		***	18	days.	

The corresponding Christian date was, therefore, the 18th December 1398, which, by the tables of the Christian calendar, was a Wednesday.

The following dates taken from several different authors agree with the tables:

								Page,
A. H. 422	Muharram	1	=	Tuesday	Baihaki, I	I. M. Ellio	t, II,	61
633	Shabân :	29	=	Tuesday	Minhâj, H	. M. Elliot	, II,	330
638	Muharram	8	=	Monday				338
640	Rajab	9	-	Friday		100		343
645	Muharram	2	-	Thursday				347
655	I Rabi	6	=	Sunday				356
656	Muharram	6	=	Sunday				358
108	II Rabi	8	=	Wednesday	, Timur's	own date	of	
				-	captur	e of D	elhi,	
					H. M.	E., III		443

Dowson erroneously gives 17th December 1398 as the European date of the capture instead of 18th. The 17th December was Tuesday—

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. H.	912	II Jamadi	8	Monday	Babar's	s Memoirs,	page	201
	925	Muharram	1	Monday			>>	246
	925	I Rabi	11	Sunday				260
	932	Safar	1	Friday			**	290
	933	I Rabi	16	Friday			23	347
	936	Muharram	3	Tuesday			**	425
	949	Rajab	5	Sunday	Akbar k	bornBlock	hmann.	
	963	II Rabi	2	Friday		placed on nor by Bairi		e at

Occasionally, however, the week days of both inscriptions and books will be found to differ one day from the week days of the tables. If this should be the case in several instances of the same writer, the discrepancy must be due to his having used a slightly different order of the intercalary years. The numbers of the intercalary years which I have used in the accompanying Tables are those of Ulugh Beg, which are the most generally accepted,—namely—2—5—7—10—13—16—18 —21—24—26—29. But according to Jervis the Indian Almanacs give three of the numbers differently, or one in each decade of each cycle. These different numbers are 8, 19 and 27, instead of 7, 18 and 26. The result is, that where the years 8, 19 and 27 are made intercalary, those years will begin one day *earlier* than in the Tables, and every day throughout each of those years will also be one day earlier. In the accompanying Tables I have placed Roman numerals against the intercalary years of the accepted reckoning, and stars against the three years which differ.

I have found this discrepancy of a single day in the following dates :-

		Recor	ded Date.	Date	by Tables.	•		
A. H. 630	) Safar	20	Tuesday	Monday	Ninh <b>i</b> j,	H. M. Ellic	xtt, II,	327
63	4 Rajab	6	Friday	Thursday	•••	•••	••••	
88	2 Muha	rram 1	Wednesday	Tuesday	Pandua	inscription	•	
89	9 Ramz	ân 4	Monday	Sunday	Babar's	Memoirs	••••	7
92	6 Muha	rram 1	Saturday	Friday	•••	•••	•••	281
93	4 Muha	rram 1	Saturday	Friday	•••	•••	•••	373
97	7 I Rab	ni 17	Wedneeday	Tuesday	Jahang	ir born.		
100	0 II Jai	nâdi 6	Saturday	Friday	Tabakâ	ti Akbari.		

It must be confessed, however, that not one of the above dates falls in the 8th, the 19th, or the 27th years, so that I can only suggest carelessness on the part of the writers as the probable explanation of the discrepancies. The following more glaring instances will be sufficient to show that even the best Muhammadan authors are not free from errors of this kind:

Minhâj—A. H. 634, I Rabi 18—Sunday, should be Wednesday. ————A. H. 637, Ramzan 27—Monday, should be Friday. Baber—A. H. 933, Muharram 25—Monday, should be Thursday.

This last mistake has been noticed by Erskine.

In using the general table of the initial days of the Hijra years, it is only necessary to remember that all the dates up to the beginning of A.D. 1753 are given in Julian reckoning or Old Style, and from that date in Gregorian reckoning or New Style. The week days of course remain unchanged, whichever reckoning is used. The correction of the calendar took place in Engalnd in A.D. 1752, when eleven days were struck out after the 2nd September, making the next day the 14th instead of the 3rd. This change occurred towards the end of the Hijra year 1165. In the table I have given the beginning of the year 1166 in the New Style as Wednesday the 8th November 1752. By the Old Style reckoning the date would have been Wednesday, 28th October. To find the day of the week on which any given year of the Hijra began, the following rule is given by Woolhouse—

1st.—Find the year of the current cycle by dividing the proposed Hijra year by 30.

2nd.—Divide the number of cycles thus obtained by 7, to obtain the number of the period.

Now take the year 1000 A. H. as an example—							
1000 <b>A.</b> H.	33 cycles.						
30	7						
Cycles $33 + 10 = current$	t year of cycle. $4 + 5 =$ number of period.						

Then look in the following table for the intersection of the current year of the cycle, or 10, with the number of the period, or 5, and it will be found that the initial day is Saturday, which is correct:

~		• • •		Number of the period of 7 cycles.							
Curre	ent yea	r of the	cycle.	0	0 1 2 3 4 5						
0	8			Mon.	Sat.	Thur.	Tues.	8.	Frid.	Wed.	
- 1	9	17	25	Frid.	Wed.	Mon.	Sat.	Thur.	Tues.	8.	
*2	<b>*</b> 10	*18	<b>*</b> 26	Tues.	8.	Frid.	Wed.	Mon.	Sat.	Thur.	
8	11	19	27	<b>S.</b>	Frid.	Wed.	Mon.	Sat.	Thur.	Tues.	
4	12	20	28	Thur.	Tues.	<b>S</b> .	Frid.	Wed.	Mon.	Sat.	
•5	•13	<b>*</b> 21	*29	Mon.	Sat.	Thur.	Tues.	8.	Frid.	Wed.	
6	14	22	30	Sat.	Thur.	Tues.	8.	Frid.	Wed.	Mon.	
•7	15	23		Wed.	Mon.	Sat.	Thur.	Tues.	8.	Frid.	
•••	*16	*24		<b>S</b> .	Frid.	Wed.	Mon.	Sat.	Thur.	Tues.	

The calculation of this table is based on the fact that as the cycle consists of 30 years, the whole series of week day changes will be exhausted in each period of  $30 \times 7 = 210$  years. Thus the year 1 A.H. having begun on a Friday, the following years would also begin on Friday:—

**0.S.** 

A. H. 1	=	Friday,	16th	July	622	A.D.
211	=	Friday,	13th	April	826	,,
421	=	Friday,	9th	January	1030	,,
631	=	Friday,	7th	October	1233	,,
841	-	Friday,	5th	July	1437	"
1051	=	Friday,	2nd	April	1641	,,
1261	-	Friday,	10th	January	1845	N.S.

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As the calendar was corrected in England in A. D. 1752, during the currency of the Hijra year 1165, the last entry is given in New Style, or Gregorian reckoning.

But the initial week day of any given year of the Hijra can also be obtained by a short calculation, starting from any one of the above periods. Thus taking the year 1000 A. H. as before, and remembering that the intercalary days are inserted in the following years of each cycle—

2.5 - 7.10 - 13 - 16 - 18 - 21.24.26.29The calculation is as follows :--

that is, one day over Friday = Saturday, the same as derived from Woolhouse's Table.\*

When a full table is not at hand for finding a date by simple inspection, either of the above methods will be found very useful, as both are absolutely correct.

• Woolhouse's account of the Hijra Era will be found in "Weights and Measures of all Nations."—Weale, 1856.

# XVIII.-THE BURMESE COMMON ERA.

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THE common era of Burma which is now in use is the luni-solar calendar, which was introduced from India in A.D. 638. The length of the year is exactly the same as that of the Surya Siddhânta, namely, 365 875648 days. The solar year is reckoned in the same way as that of the Hindus, and accordingly it now begins on the 12th and 13th of April, which is the calculated date of the sun's entrance into Aries according to Hindu reckoning. The luni-solar year has 12 lunar months of 29 and 30 days alternately, with an intercalary month at seven fixed periods in each cycle of 19 years. The years in which these intercalary months are inserted are the

### 2nd, 5th, 7th, 10th, 13th, 15th, 18th.

But the extra month is always inserted in the same part of the year after the month of Wahso, and is consequently named the second Wahso. The names of the 12 months are the following :--

1.	Tâgu	 Chaitra	 March-April.
2.	Kasong	 Vaisâkha	 April-May.
3.	Nayong	 Jyeshtha	 May-June.
4.	Wahso	 Ashâdha	 June-July.
5.	Wahgoung	 Srâvana	 July-August.
6.	Tauthalin	 Bhâdrpada	 August-September.
7.	Thadinkyut	 Aswina	 September-October.
8.	Tasoung-mong	 Kartika	 October-November.
9.	Natdart	 Agrahayana	 November-December.
10,	Payatho	 Pausha	 December-January.
11.	Tabodweh	 Mâgha	 January-February.
12.	Taboung	 Phâlguna	 February-March.

The year begins with the new moon immediately preceding the **Commencement** of the solar year, and ends with the 30th day of Taboung.

The initial point of the era is Saturday the 21st March A.D. 638 of the Julian reckoning, or 24th March A.D. 638 of the Gregorian reckoning. In computing any date the calculation is much simpler than that of the usual rules for the Hindu luni-solar year, as the reckoning is referred to the beginning of the era, and not to the beginning of a yuga or mahâ-yuga several thousands of years back. The process is otherwise the same as that for any day of the Hindu luni-solar year, with the exception that the fixed position of the intercalary month saves some trouble.

To ascertain whether any particular year will be intercalary or not, it is only necessary to livide the number by 19, and if the remainder be either 2, 5, 7, 10, 13, 15, 18, then an intercalary month will be added in that year; but if it be any other number, the year will be an ordinary one.

In India the only examples of Burmese dates that have hitherto been met with are in the few Burmese inscriptions found at the Mahâbodhi temple at Buddha Gaya. Three of these, which refer to the Great Temple itself, are of so much importance that I gladly take this opportunity of giving my readings of their dates. The longest inscription is one a stone slab which was found by the Burmese embassy fixed in one of the inner walls of the Mahant's residence. Three translations of it have been published,—1st, by Ratna Pala, a Singhalese Pali scholar; 2nd, by Colonel Burney; and 3rd, by Mr. Hla Oung, a Burmese scholar. The inscription professes to record the history of the original building and the successive repairs of the temple. Two dates are given in figures, accompanied, in each case, by the day of the week as well as the day of the month. The following is a brief abstract of this valuable record :—

1-Asoka built the first temple.

2-Temple rebuilt by Naik Mahanta.

3-Temple restored by Raja Sado-Meng.

4-Raja Sempyu-Sakhen-tara-Mengi deputed his guru Sri Dhamma Râja Guna to superintend the restoration of the temple work not completed.

5-Varadasi Naik Thera petitioned the Raja to undertake the work, which was then entrusted to "the younger Pyu-Sakheng" and his minister Ratha.

This last work was begun in the Sakka Raj year 441, on Friday the 10th of Pyadola, and finished in 443, on Sunday the 8th of Tachung Mangla (or Tasoung-Mong).

Here I have given my own reading of the dates as 441 and 448, for the following reasons:

A copper gilt canopy, which was found by Mr. Beglar carefully buried eight feet under the ground level to the west of the Great Temple, bears two inscriptions in Burmese and mediæval Indian characters. The Burmese inscription is much injured, but I can still read the name of *Sri Dhamma* in it. The Indian inscription, which is nearly perfect, opens as follows :—

### Sam 391, Sri Dharma Raja Guru.

Here the date which is very clearly inscribed can only be referred to the Burmese common era of A.D. 638, which fixes the period of Dharma Raja Guru's visit to 391 + 638 = A.D. 1029. Now the account of the later mission of "the younger Pyu-Sakheng" shows that it must have followed not long after Dharma Raja Guru's Mission. I therefore read the two dates as 441 and 448, in preference to the very much later dates of 667 and 668, which had been generally adopted previously. I have tested all the possible readings of these dates as 641, 647, 661, 667, 648, and 668, by the week days mentioned in the inscription. Not one of them stands this test, whereas the two dates of 441 and 448 which I have adopted do actually agree with the week days recorded in the inscription. The evidence in favour of my readings is, therefore, doubly strong. The later history of the temple will therefore be as follows:

Burmese era 391 = A.D. 1929-Dharma Raja Guru's Mission.

These readings of the dates allow a period of 6 years and 10 months for the restoration, instead of the short period of only 10 months allowed by the former readings.

The two dates noted in the inscription correspond, according to my calculations, with the following European dates :

 Sakka Raj year 441, Friday, 10th of Pyadola was Friday, 6th December A.D. 1079.
 Sakka Raj year 448, Sunday, 8th of Tachung Mangla was Sunday, 18th October A.D. 1086.

### XIX.—NEWAR ERA.

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THE Newar era is peculiar to Nepal, where it was introduced in A.D. 580 by Raja Råghava Deva. Pandit Bhagwan Lal Indarji has published several inscriptions dated in this era. The earliest date is S. 533, or A.D. 1413, of Raja Jyoti Malla, who may be the Jestili Mall of Prinsep's List. The next is one of Siddhi Nri-Sinha, dated in S. 757, or A.D. 1637. This Prince must be the Sid iha Nara Sinha of Prinsep's List, whose reign is assigned to A.D. 1654—1685. But this inscription places him at least seventeen years earlier. He was the grandson of Jayakusa Malla by his daughter, to whom was left the district of Pâtan. A third and a fourth inscription furnish another correction. These are records of Pratapa Malla of Kathmandu, dated in S. 769 and 778, or A.D. 1649 and 1658, which serve to place this Raja seven years earlier than in Prinsep's List.

Prinsep obtained his information from Dr. Bramley, who was Residency Surgeon in Nepâl. The year begins in October, and 951 years had expired in 1831. The Newâr era is used upon the coins of the Newāri Rajas of Bhatgaon, Kâthmàndu, and Pâtan. Marsden has published coins of Jaya Prakāsa Malla II. of Kāthmāndu, dated in S. 819 and 823, or A.D. 1699 and 1703, which agree with the dates of 1606 and 1706 given in Prinsep's List. This era was discarded in A.D. 1768 by the Gorkha conqueror Prithi Nàràyana Sàh, who introduced the use of the Sáka era, which is still placed on all the coins of Nepâl.

# XX.—CHÂLUKYA ERA.

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In the Châlukya inscriptions the dates are generally recorded in the Sâka era. But in the year Nala of the Jovian cycle of 60 years, or A.D. 1076,\* the Châlukya king Vikramâditya Tribhuvana Malla established a new era called the Châlukya Vikrama Varsha. From his own inscription we learn that he set aside "the ancient Saka, and established the Vikrama Saka in his own name." † He reigned for fifty-one years from Saka 998 to 1049. His era dates from his accession in Saka 998, or A.D. 1076. He was one of the most powerful of the Châlukya kings, and his era seems to have been adopted by some of the neighbouring princes. Thus the Kadamba king Tailapa Deva dates one of his inscriptions on "Monday, the full moon day called Herjuggi (or Aswina) of the Sarvadhari Samvatsara, which was the thirty-third year of the glorious Châlukya Vikrama Varsha." Sarvadhâri, the twenty-second year of the cycle, fell in A.D. 1108 in Southern India, and as it was the thirtythird year of the new Châlukaya era, the first year must have fallen in 1108 - 32 = 1076 A.D.

After the death of Vikrama in A.D. 1127 the power of the Châlukyas began rapidly to decline, and in Saka 1084, or A.D. 1162, their throne was seized by Vijala Kalâchuri, after which their era would seem to have fallen into disuse.

† Royal Asiatic Society's Journal, IV, 14.

<sup>\*</sup> Brown's Cyclic Tables, pp. 2, 57.

# XXI.—ERA OF LAKSHMANA SENA.

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THE earliest notice of this era by name occurs in an inscription from Buddha Gaya published by James Prinsep, in which the date is thus given:

Sri Mat Lakshmana Sena Deva pôdânam--otita rôjye Sam 74, Vaisâkha-badi 12, Guran.

"The reign of Sri Mad Lakshmana Sena Deva having passed," or as Babu Râjendra Lala translates it---

"After the *expiration* of the reign of the auspicious Lakshmana Sena Deva."

This era, therefore, was established on the death of Lakshmana Sena, the son of Ballàla Sena, Râja of Bengal. It is still used in Tirhut and Mithila in almanacs, but always along with the better known eras either of Vikrama or Sàka. Unfortunately the people, who thus use it, know nothing about it. and the equivalent dates give slightly varying results. I believe, however, that I have succeeded in clearing up the difference. I number the following statements for easy reference hereafter :--

1. The earliest mention of the era is by Colebrooke, who speaks of "Lakshmana Sena as a renowned monarch who gave his name to an era of which 692 years are expired." The Preface containing this statement is dated 17th December 1796: the year in which this era was established must have been A.D. 1104, and A.D. 1105 would have been the year 1 expired.

2. The next mention is by Buchanan. who says that, according to the almanaes of Mithila. A.D. 1810 was the 706th year of the era of Lakshmana Sena, which, as he remarks, places its beginning in A. D. 1104.<sup>4</sup>

3. In another place, however, he gives a slightly different statement as follows: " In Mithila the year is lunar (i.e. luni-solar) and commences

<sup>\*</sup> Preface to the Digest of Indian Law-Essays, L 472.

<sup>\*</sup> Buchanan's Ensure India, III, 41 and 133.

### ERA OF LAKSHMANA SENA.

on the first day after the full moon of Ashâdha. Here they say that Sak was the same as Sâlivâhan, and this year 1810 is reckoned the 1732nd year of his era. It is also the 1866th year of Samvat, who, according to them, is the same with Vikram. In these two points they agree with the Brahmans of the South, and differ totally from those of Bengal. They have still another era called after Lakshman, king of Gaur, and of which this is the 705th year."

4. Babu Râjendra Lâla mentions the Saduktikarnâmrita as bearing the two dates of Saka 1127 and Lakshmana Sena era rasa + eka + ninsa.\* The book was written by Sridhara Dâsa, son of Vatsa Dâsa, a general under Lakshmana Sena. The words expressing the date are unfortunately defective.

5. Babu Râjendra also notes that the Dâna-Sâgara was written in Saka 1019, or A.D. 1097, by Halâyudha, the spiritual adviser of Lakshmana Sena.<sup>†</sup> I mention this for two reasons : 1st, because it shows that Lakshmana Sena I. was reigning *before* A.D. 1105, when the era was established; and 2nd, because this Lakshmana must be a different prince from the Lakshmana of No. 4, who can only have been Lakshmana Sena II., or Lakshmaniya.

6. A copper-plate inscription of Siva Sinha Deva, Raja of Tirhut, gives the following dates : - " Lakshmana Samvat 293, Sråvana-Sudi 7, Gurau," coupled with " Saka 1321, and Samvat 1455." The Saka date is equivalent to A.D. 1399, but the Vikrama date of 1455 gives A.D. 1398. The difference between the two dates is only 134 years instead of 135. This difference was also noticed by Buchanan, who states that Kamalakanta, the most learned Brahman in the Rangpur district, made the Samvat era begin 134 years before that of Saka 1 In the Mithila district he found the same, as he notes (see No. 2) that the year 1810 A.D. was reckoned as Sake 1732 and Samvat 1866, withonly 134 years' difference. As the Sake date is the correct one, I have adopted it in preference to the Samvat date, which is but little used in Bengal. But the best proof of its accuracy is the fact that it agrees with the week day mentioned in the copper-plate. The dates are Thursday the 7th Srâvana-Sudi, 1321 Sake, or A.D. 1399. As the proof of this is very simple, I give it here as another example of the general accuracy of the

<sup>\*</sup> Notices of Sanskrit Manuscript, III, pp. 134, 149.

<sup>†</sup> Bengal Asiatic Society's Journal, 1865, p. 137.

<sup>‡</sup> Eastern India, III, p. 506.

tables for working out any luni-solar date. Sake 1321 = Kâli-Yuga 4500---

Solar Ahargana. Luni-solar Ahargana. 4500 years = 1643,664.4042 days ... 1594,651.7489 days. Deduct constant -2.1475 ••••• 1643,662.2567 days ÷ 7 = 6.2 days over 1594,651.7489 = Thursday, 27th March 1399, 1st day of Solar year. 49.010.5078 = 27th March 1600 lunations = 47,248.9406 - 19 days. 1761.5672 8th March=1st day of luni-solar year. 59 lunations =1742.3046

Luni-solar year begins 19.6626 days earlier.

and as Srâvana-Sudi 7th is the 125th day of the year, it fell on Thursday, 10th July 1399, O. S.

7. There is another inscription dated in the era of Lakshmana Sena, which also gives the week day. Prinsep read it as Sam. 74,\* which would be equivalent to A.D. 1180 and Kâli-Yuga 4281. This is the inscription referred to in the beginning of this account as being dated from the close of the reign of Lakshmana Sena. But taking Prinsep's reading of the year as S. 74, my calculation shows that the week day does not agree with *Thursday*, Vaisâkha-Badi 12.

8. I possess a third inscription dated in Sri Mal Lakshmana Senasyátita rájye Sam 51. "In the year 51 after the close of the reign of Sri Lakshmana Sena." Then follow some letters and figures which, no doubt, give the month and the day; but I have not yet been able to read them.

In noticing the almanacs of Mithila, which mention this era, I have said that the equivalent dates give slightly varying results. This is even the case with the two notices of Buchanan, who in one place gives the year 705 of the Lakshmana era as the equivalent of A.D. 1810, and in the second place, 706.

9. Babu Râjendra Lâla Mitra has collected several instances of the use of this era by the people of Tirhut.<sup>+</sup> He quotes Babu Rajakrishna Mukarji as having brought to notice the fact that it was still current

<sup>\*</sup> Bengal Asiatic Society's Journal, Vol. V, p. 657.

<sup>†</sup> Ibid, 1878, p. 396.

in Tirhut, and that A.D. 1874 was the year 767 of the Lakshmana era. Deducting 766 from each number we get A.D. 1108 as the year 1 of the era.

I also obtained several equivalent dates from some manuscript Tirhut almanacs in the possession of Pandit Babu Lâl of Darbhanga.

10. The oldest of these was dated in Saka 1698, and Lakshmana Sam. 669, and Vikrama Sam. 1833, equivalent to A.D. 1776. Deducting 668 we get A.D. 1108 = the year 1 of the Lakshmana era.

11. A second almanac, dated in Lakshmana Samvat 732, gave the equivalent dates of Sake 1762, and Vikrama Samvat 1897, both corresponding with A.D. 1840. Deducting 731 we get A.D. 1109 = the year 1 of the Lakshmana era.

12. A third almanac, dated in Lakshmana Samvat 773, gave Saka 1802 as the equivalent corresponding with A.D. 1880. Deducting 772, we get 1108 = the year 1 of the era.

13. A fourth almanac, dated in Lakshmana Samvat 730, gave Vikrama Samvat 1895 corresponding with A.D. 1838. Deducting 729 we get 1109 A.D. = the year 1 of the era.

On comparing the dates derived from the almanacs, it will be seen that not only do they differ amongst themselves, but there is not one of them that agrees with the date derived from the copper-plate inscription, which places the year 1 of the era in A.D. 1107. These various dates are as follow :—

No.	1	Colebrooke	••••	A.D.	1796 = 692	L.S.	or	Δ.D.	1105 = 1
"	2	Buchanan		,,	1810 = 706	,,	or	,,	1105 = 1
"	3	Do.		,,	1810 = 705	,,	or	,,	1106 = 1
,,	6	Copper-plate		"	1399 = 293	,,	or	"	1107 = 1
"	9	Almanac		"	1874 = 767	,,	or	,,	1108 <b>= 1</b>
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10	Do.	•••	,,	1776 = 669	,,	or	,,	1108 = 1
. "	12	Do.	••	.,	1880 = 773	,,	or	"	1108 🛥 1
"	11	Do.	•••	,,	1840 = 732	,,	or	,,	1109 <b>= 1</b>
,,	13	Do.	•••	"	1838 = 730	,,	or	,,	1109 = 1

The differences are not very great; but in dealing with the establishment of an era, the strictest accuracy is imperatively necessary. What may be the cause of these differences I can only guess at. I notice that Buchanan refers the beginning of the year to the full moon of Ashådha.\* But I was informed in Tirhut that the Lakshmana Samvat

<sup>\*</sup> Eastern India, III, 139.

### ERA OF LAKSHMANA SENA.

begins with 1st Mågha-Badi, while both the Vikrama and Saka years begin with the 1st Chaitra-Sudi. Babu Råjendra also states that the Lakshmana year is a luni-solar one, "commencing from the 1st of the month of Mågha," that is, *Mågh-Badi* 1, or middle of January.

Before closing this account I must notice a very serious error into which Babu Råjendra has fallen about Lakshmana Sena himself. After having translated the Buddha Gaya inscription dated in S. 74, which declares that the era of Lakshmana Sena began "after the expiration" of his reign, he on the very next page makes the era date from the beginning of his reign.\* Thus he says, "Beginning with (A.D.) 1106 Lakshmana had a very prosperous reign of many years." And again he says, "A period of 30 years would not be too much ... and Lakshmana's reign may very fairly be assumed to have extended to the close of the fourth decade of the 12th Century." So that the year 1706 A.D. was both the beginning and the end of Lakshmana's reign. Again on page 402, in his list of the Sena Rajas, he gives A.D. 1106 as the beginning of Lakshmana's reign. Lastly, in page 397, in speaking of the Tarpondighi inscription, which is dated in the 7th year of Lakshmana's own reign, he notes that no attempt had been made to trace the initial date of the era.

How the learned Babu came to the conclusion that the year A.D. 1106 was the beginning of Lakshmana Sena's reign I cannot even guess. He himself publishes the notice that the *Dana-Sagara* was written in Saka 1019, A.D. 1097, by Halâyudha, the spiritual adviser of Lakshmana Sena. This alone is sufficient to establish the fact that Lakshmana Sena was reigning at least nine years before the adoption of his era. But there is another fact recorded by one of the earliest Muhammadan historians, Minhaj-us-Siraj, which points very clearly to an earlier period for the reign of Lakshmana Sena. This is the statement that Lakshmaniya, the last Hindu king of Gaur, had reigned for 80 years previous to the conquest of Bengal by Bakhtiyar Khalji in A.D. 1195.

\* Bengal Asiatic Society's Journal, 1878, p. 398.

# XXII.—SIVA-SINGHA SAMVAT.

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THIS era is known only from its mention in Colonel Tod's inscription from Balabhi. From the discussion on the date of this inscription in my account of the Balabhi era, it will be seen that its initial point corresponds with A.D. 1114. It seems probable that it may refer to the expulsion of the Jaina Rajas from the Peninsula of Gujarat.

### XXIII.—FASLI ERA OF BENGAL.

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THE Fasli Era owes its origin to Akbar's love of innovation. It should properly be dated from the time of his own accession, or the 2nd of Rabi-us-Sâni in the Hijra year 963, or 14th February 1556; but the actual solar reckoning of the Fasli system in Bengal begins with the 1st Vaisâkh of the Hindu solar year, on Saturday the 28th March, O.S., or Saturday the 6th April, N.S.\* In the account published by James Prinsep, the different reckonings of the Fasli calendar in various parts of India are all noticed. It is altogether a mongrel era, the first 963 years being purely lunar ones of the Hijra Calendar, after which the years are purely solar ones, the Bengâli sanh beginning with the 1st of the Hindu Vaisâkh, the Fasli of Northern India with the 1st of the lunar Aswina, and the Vilayati with the 1st of the solar Aswina.

There is also a later Fasli *era* in the Dakhin, which was established by Shah Jahân in A.D. 1636 or at 1046. The beginning of the year has been fixed by the Madras Government to the 12th of July.

\* James Prinsep gives 11th April 1556 as the 1st of Vaisakh, but this is clearly a mistake, as his own Tables give the same date for the beginning of the Fasli year in 1856. — Useful Tables, p. 36.

# XXIV.-ILÂHI ERA.

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THE Târikh Ilâhi, or "Ilâbi Era," was established by Akbar so late as the 30th year of his reign in A.H. 992, or A.D. 1584. The courtly Abul Fazl says, that it was established "in order to remove the perplexity that a variety of dates unavoidably occasions. He disliked the word Hijra (flight), but was at first apprehensive of offending ignorant men, who superstitiously imagined that this era and the Muhammadan faith were inseparable." "Amir Fateh-Ullah Shirâzi corrected the calendar from the tables of Ulugh Beg, making this era to begin with His Majesty's reign, and contemplating the character of the monarch, named it Tarikh Ildhi, or the Mighty Era." "The years and months are both natural solar, without any intercalations. The names of the months and days correspond with the ancient Persian. The months are from 29 to 30 days each. There is not any week in the Persian month, (the) 30 days being distinguished by different names, and in those months which have 32 days, the last two are named Roz-o-Shab (day and night), and in order to distinguish one from the other are called first and second."

The Ilâhi era dates from Akbar's accession to the throne, which, according to the Tabakât-i-Akbari, was Friday the 2nd of Rabi-us-Sâni, A.H. 963, or 15th February 1556, O. S.\* It was employed extensively, though not exclusively, on the coins of Akbar and Jahângir, and appears to have fallen into disuse early in the reign of Shah Jahân. Marsden has published a coin of this king with the date of Snnh 5 Ilâhi, coupled with the Hijra date of 1041. But in this case the Ilâhi date would appear to be only the *jalus*, or year of the king's reign.<sup>+</sup>

In the account quoted above from Abul Fazl, which Prinsep has also copied, the lengths of the months are said to be "from 29 to 30 days each;" but in the old Persian Calendar of Yazdajird, they were

<sup>\*</sup> Nizâmuddin in Elliot's Muhammadan Historians, V, p. 241.

<sup>†</sup> Numismata Orientalia, Vol. II, p. 640.

### ILAHI ERA.

30 days each, the same as amongst the Parsis of the present day. The names of the twelve months, all of which are found on the coins, are as follows :---

1 - Farwardin.	5 —Mirdåd.	9.—Ader.
2.—Ardi-behisht.	6.—Shariur	10. <b>—D</b> ê
3Khurdåd.	7.—Mihir.	11Bahman.
4.—Tir.	8.—Abân.	12.—Isfandarmas.

The Ilâhi era, as well as the old Persian era, had a different name for each of the 30 days of the month—

Dana

			Days.		
1.	Hormasd.	11.	Khurshid.	21.	Ram.
8.	Bahman.	12.	Mhor.	22.	Guvâd.
8.	Ardi-behisht	13.	Tir.	23.	Depdin.
4.	Shatiur.	14.	Gosh.	24.	Din.
5.	Aspandåd.	15.	Depmehel.	25.	Ashasang.
6.	Khurdåd.	16.	Mihir.	26.	Ashlåd.
7.	Amerdåd.	17.	Serosh.	27.	Asmân.
8.	Depådar.	18.	Rashne.	28.	Zamiâd.
9.	Adur.	19.	Farwardin.	29.	Maharesphand.
10.	Abin	20.	Bahrâm.	30.	Anirâm.

The following is Abdul Kådir's account of the establishment of this era:\* "The era of the Hijra was now abolished, and a new era was introduced, of which the first year was the year of the Emperor's accession (963). The months had the same name as at the time of the old Persian kings, and, as given in the *Nicabuccibyan*, fourteen festivals also were introduced corresponding to the feasts of the Zoroastrians; but the feasts of the Musalmans and their glory were trodden down, the Friday prayer alone being retained, because some old, decrepit, silly people used to go to it. The new era was called Tàrikhi Ilâhi, or 'Divine Era.' On copper coins and gold-mohurs, the era of the Millenium was used, as indicating that the end of the religion of Muhammad, which was to last one thousand years, was drawing near."

I have read somewhere that in A.H. 992, when the Hijra millenary began to draw towards its close, and Akbar was meditating the establishment of the Ilâhi era. one of his courtiers stated openly that the eras even of the greatest kings did not last beyond 1.000 years. In proof of this he cited the extinction of some Hindu era, which was abolished at the end of 1.000 years.

\* Biochmann's Ain-i-Akbari, p. 195.

84

### XXV.—CHRISTIAN ERA.

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THE era which has been adopted by all Christian nations is reckoned from the supposed date of the birth of Christ, and has, therefore, been called Anno Domini, or the "year of our Lord." The era was first brought into use by Dionysius Exiguus, a Roman Abbot, who fixed the birth of Christ in the 45th year of the Julian era, or A.U.C. 753 of the Roman Calendar. "Previous to this, the Christian Churches had for about a century dated from the Diocletian era, or year of Martyrs." The true date of the nativity is now admitted to be four years earlier, or in 4 B.C. of the present Christian reckoning. But the use of the Christian era did not become general until A.D. 730, in the time of Pope Gregory II.

The year was the same as the Julian year, and consisted of 3654 days, the fraction being arranged by making three consecutive years of 365 days, and adding a whole day to the 4th year. But after the lapse of many centuries it was discovered that this value of the solar or sidereal year was too much. In A.D. 1582, when the amount of excess was ten days, the calendar was corrected by order of Pope Gregory XIII by striking out ten days in October from the 5th to the 14th. In England the correction was not made until A.D. 1752, when, the error having still further increased, eleven days were struck out from 3rd to 14th September. The true length of the year is 365 24219 days, but for convenience it is made 365 2425 days, or three days less than the Julian reckoning in 400 years. This is effected by omitting the extra day in the three odd hundred periods of four centuries. Thus the years 1600 and 2000 are leap years, but 1700, 1800 and 1900, are common years.

The accompanying tables for ascertaining the week day of any date either before or after Christ, and according to either the Julian or Gregorian reckoning, were prepared by myself more than twenty years ago. Since then I have had ample opportunities of testing their usefulness in facilitating the very common operation of finding the week day of any given date. According to my experience, their use is both more rapid and less troublesome than any others that I have tried. Every week day is shown at once by simple inspection. I have also invented the following short process for finding the initial day of any year of the Old Style or Julian reckoning.

Rule.—Set down the date and add one-fourth, rejecting fractions. Deduct two years, if leap year, but only one year if an ordinary one. Divide by 7, and the remainder, counted from Sunday as 1, will be the initial day of the year. The following examples will be sufficient. Both results agree with the table—

A.D. 1600, leap year.	A.D. 1625, ordinary year.	
÷ 4	÷ 4	
400	406	
2000	2031	
- 2	-1	
1998	2030	
÷7	÷ 7	
285+3 - Tuesday.	290 = Saturday.	

There is an old memorial verse, which is much used for ascertaining the initial day of each month when the initial day of the year is known. The capital letters are the Dominical letters showing the days of the week, counting from Sunday as 1.

> At Dover Dwell George Bruce, Esquire, Good Christopher Finn, And David Fryer.

Here we see at once the initial day of each month. But as the same may also be obtained at once from an inspection of the table, the chief use of this memorial verse is when the table is not at hand.

The tables themselves are so clear and simple that they scarcely require any explanation. But suppose it be required to find the week day of the 20th October 1712 A.D. First look in Table III of the Julian Calendar for the year 1700 A.D., then run the eye down until it meets the horizontal line opposite of the year 12, and the intersection will show the initial day of the year 1712 as Tuesday. Next look in Table II at top for the horizontal line of week days, beginning with Tuesday, which is the third one of the seven, and as 1712 was a leap year, look for the name of October in the right hand column. Then,

### CHRISTIAN ERA.

taking the 20th day of October, and running the eye upwards until it meets the horizontal line of week days, of which Tuesday was the 1st of January in that year, it will be seen that Monday was the 20th of October, as recorded at the head of the Spectator "Monday, October 20th, 1712."

As a second example let it be required to find the week day of the 7th November 1752 after the Gregorian reckoning or New Style had been adopted in England. First look in Table IV of the Gregorian Calendar for the initial day of A.D. 1752, which will be found to be Saturday. Then with this as the first day of January look in Table II as before for the month of November and the seventh day, which will be Tuesday. The Adventurer is dated "Tuesday, Nov. 7th, 1752."

As a last example, I will take a still earlier date recorded by Bacon, "1617, Feby. 6th, Friday." Here the date being prior to the 25th March the true year was 1618, as now reckoned. The initial day in Julian reckoning was Thursday, and the year being an ordinary one, the names of the months must be read from the left side of Table II, which gives Friday as the 6th February 1618.

### XXVI.—SAURA-MANA;

### OR,

### SOLAR RECKONING.

THEORETICALLY the Hindu solar year should begin with the sun's entrance into Aries; but owing to the greater length of the Hindu year, the 1st of Vaisakh has gradually receded, so that the first day of the solar year now falls on the 12th or 13th of April. The Indian computations were all made from the beginning of the Mahâ-Yuga, and owing to the difference in the length of the solar year as laid down by Aryabhatta and Varåha Mihira, there is often a discrepancy of one day in the beginning of the Hindu year in the places which make use of their different tables. The actual difference is, however, not so much, being only about one-third of a day in 4000 years. According to Warren the number of days assigned by Aryabhatta to a Maha-Yuga of 4,320,000 years is 1,577.917,500 in the south of India, and 42 more in the MSS. preserved in Bengal. The former gives a year of 365 2586805 days, and the latter of 365.258692 days.\* But the Surya Siddhanta of Varaha Mihira gives 1,577.917,823 days to the Mahâ-Yuga, which makes the year somewhat longer, or 365 2587564 days.

As the number of revolutions was complete at the beginning of the Kâli-Yuga, it is not necessary to go back, as the Hindu astronomers do, to the beginning of the Mahâ-Yuga. It will be sufficient to begin the computation from the commencement of the Kâli-Yuga itself. In the accompanying Tables, Nos. XI, XII, and XIII, I have given the number of days elapsed from the beginning of the Kâli-Yuga down to K. Y. 5100, according to both computations now in use, that of the Surya Siddhânta in Northern India and that of Aryabhatta in Southern India. The fractions of days are given in the convenient form of decimals instead of the troublesome gharis, palas, and vipalas of the native astronomers.

As an example of the working of the Tables I will take the year A.D. 1857, to find on what day the 1st Vaisåkh fell. According to the

<sup>\*</sup> Bentley, p. 139, makes the Bengali year slightly different as 365-258690 days.

### SOLAR RECKONING.

Surya Siddhânta reckoning, the Kâli-Yuga year 4958 (or 3101+1857) began on the 11th of April, while Warren's Tables also give the same date. The process in both reckonings is as follows :—

Su <b>rya</b> Sidd	Arya Siddhánta.		
Years,	Days,	Days.	
4900 contain	1.789,767.9067	1.789,767.5346	
58 "	21,185.0078	21,184 <sup>.</sup> 9934	
4958 contain	1.810,952.9145	1.810,952 <sup>.</sup> 5280	
Deduct constant	- 2.1475	- 2.1475	
	1.810,950-7670	1.810,950.3805	

After striking out the weeks by dividing both by 7, there remains 1.7 days over, and 1.3 days over.

As the week days are counted from Friday, the first day following was Saturday, which in the year 1851 A.D. was the 11th of April. Should the large fraction of '767 of a day be reckoned as a whole day, then the initial day of the solar year in Northern India would be Suuday, 12th April 1857, and this I find is the actual date given for Bengal in the Calcutta Gazetteer of that year.

The initial day of the year having been fixed, it is a very simple process to find any particular day of a given month, by an inspection of the Table of solar months, with the collective number of days for the whole year. The months themselves are of varying lengths with broken periods; but for the calendar they are made to consist of whole numbers. Then suppose it be required to find the day of the Christian year corresponding with the 10th of Kartika of the solar year 4958, Kâli-Yuga, a reference to the Table will show that the day required is the 197th day of the year, which is to be reckoned from the 12th of April as the first day. A reference to the Christian Table of days shows that the 12th of April is the 71st day, to which adding 196, we get the 267th day of the Christian year, or the 22nd of November 1857.

# XXVII.—CHANDRA-MÂNA.

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THE Chandra-Mana, or luni-solar calendar of the Hindus, is a much more elaborate system of reckoning. The object of the Chandra-Mâna is to combine the solar and lunar reckonings, so that the years may be reckoned by the course of the sun, while the months are regulated by the revolutions of the moon. For this purpose a cycle of 19 solar years was adopted, as being equal, or nearly so, to 235 lunations or revolutions of the moon of 29 5306 days. The periods do not quite tally, as 19 solar years are equal to 6939 9163 days according to Varâha Mihira, and 6939 9149 days according to Aryabhatta, while 235 lunations are equivalent to only 6939 6910 days. The difference is nearly onefourth of a day in 19 years.

The year consists of 12 lunar months of 30 and 29 days alternately, making altogether 354 days. The deficiency of eleven days less than the solar year, is made good by the addition of seven intercalary months in each cycle of 19 years, which are inserted in the

3rd, 5th, 8th, 11th, 14th, 16th, 19th years.

As these intercalary months also consist of 30 or 29 days, the cycle of 19 years is thus made to consist of  $19 \times 12 = 228 + 7 = 235$  lunations. The Hindu luni-solar year, therefore, agrees very closely with the Greek cycle of Meton, which also consisted of 19 solar years, or 235 lunations. The seven intercalary months of Meton were inserted in the following years:

3, 5, 8, 11, 13, 16, 19.

The only difference between this arrangement and that of the Hindu series is in the 5th intercalation, which was made in the 14th instead of in the 13th year. But in spite of this close agreement, I

think it almost certain that the two cycles were independently developed, although they may perhaps have had a common origin. The difference in the *mode* of intercalation is so great that it seems quite impossible that one can have been borrowed from the other. In the Greek cycle, the intercalary month has a fixed position, while in the Indian cycle both the name and the position are constantly changing. The name of the intercalary month is determined in the following manner—" When two new moons fall within the same solar month, as for instance on the 1st and 30th of Chaitra, then the name of Chaitra, or the corresponding lunar month, is repeated, the year being then intercalary with 13 months. The extra month is called *adhika* (or added), and the other *nija* (or ordinary). By the rule of the Surya Siddhânta, the intercalated month is to be placed in the middle of the ordinary month. In Southern India the whole intercalary month is placed before the ordinary one.

The common rule followed for intercalation is thus given by Warren. When the luni-solar year begins-

On the 1st of the solar Chaitra, then	Chaitra will be intercalary.
On the 2nd or 3rd	Vaisâkha "
On the 4th or 5th	Jyeshtha "
On the 6th, 7th, or 8th	Srâvana "
On the 9th or 10th	Bhâdrapad "

"It happens once within each term of 160 years that there is no new moon in one of the last six lunar months, which from the sun being in perigee contain only 30 and 29 days each." "To obviate this, that month is expunged, while two others for the opposite cause are repeated. This double intercalary year with its expunged month is called Kshaya Samvat-sara."

In the General Table, which gives the names of the intercalary and expunged months, I have adopted the calendar published by Cowasjee Patell. The initial days of the years I have calculated myself throughout up to A.D. 540. The early calculations have been made with the solar reckoning of Aryabhatta: but from 541 down to the end, according to the solar reckoning of Varâha Mihira. Cowasjee Pateil's Tables are calculated according to Aryabhatta, whose reckoning is still used in Southern India.

As the luni-solar year begins with the new moon immediately preceding the 1st of the solar Vaisâkh, the first step to be determined is the number of days by which the one precedes the other. For this purpose the beginning of the solar year has to be fixed, as already shown

in the account of the Saura-Mâna, using the Solar Ahargana of the Surya Siddhânta for the North Indian dates and Aryabhatta's Solar Ahargana for South Indian dates. The next step is to find the number of days of the luni-solar Ahargana in the given period, and to deduct this total from the number of days of the Solar Ahargana already found. The remainder is to be reduced by continued subtraction of whole lunations, until the last remainder is less than one lunation. Then that last remainder shows the exact number of days by which the new moon precedes the 1st day of the Solar Vaisâkh.

As an example of the process I will take the date of Kâli-Yuga 4958, or A.D. 1857, of which the initial days have already been found in my account of the Saura-Mâna or solar reckoning. As the Luni-Solar Ahargana of the Surya Siddhânta is used in the South as well as in the North, one process will be sufficient—

4900 years of luni-	solar reckoning =	1736,398·5710 days.
58 "	,,	20,553.2892
4958 years	=	1756,951.8602 days.
Deduct from the Se	olar Ahargana	
already found fo	r N. India	1810,950 7670 days.
	Difference	53,998-9068 days
Deduct 1800 lunati	ons	53,155 0582
		843-8486
Deduct 28 lunati	ons	826·8564
	Days	16.9922

The new moon, therefore, precedes the beginning of the solar year by 16.99, or 17 days. Then as the 1st of the Solar Vaisâkh fell on the 11th of April 1857 in North India, the new moon will have fallen on the 24th March, and the beginning of the luni-solar year, or the 1st Chaitra-Sudi, on the following day or 25th March. In Southern India it would have been the same according to my reckoning from Aryabhatta's length of the solar year; and this also is the day given by Warren. But according to Cowasjee Patell, it was the 26th March.

I have tested these Tables for several dates at distant intervals and have found them correct—

1. On the 5th February B. C. 21 there was an eclipse visible in India. By the Tables the first day of the solar year was Wednesday,

92

14th March, and the first day of the luni-solar year was Tuesday the 6th March, from which date counting backwards 29½ days for the previous conjunction of the sun and moon, we get the 5th February.

2. In A.D. 314, on the 3rd of March, there was a grand eclipse of the sun visible over E. Asia. According to Cowasjee Patell, the first day of the luni-solar year A.D. 314 was the 3rd of March.

3. In A.D. 490, on the 7th March, there was an eclipse of the sun visible over S. E. Asia. According to Cowasjee Patell, the first day of the luni-solar year was the 8th March, which is right according to the rule that the first day of the new year is the day after the conjunction.

4. On the 4th March 1840, I saw an eclipse of the sun in N. India. According to Cowasjee Patell, and also according to my own reckoning, the luni-solar year began on the 3rd April 1840, which is exactly one conjunction later.

5. In my account of the Bârhaspatya-Mâna, I have given another example of the correct working of the Tables for an eclipse of the year 792 A.D., which is mentioned in one of the Indian inscriptions.

6. But perhaps the most striking illustration of the general accuracy of the Tables is the eclipse of the moon, which is recorded to have happened in the month of Srâvana Samvat 1200. The inscription in which this is found is one of "three grants of land found at Ujjayani," on which Colebrooke makes the following remarks:\*

"One of three grants or patents records a donation of land made by the reigning sovereign of Dhârâ, on the anniversary of the death of his father and predecessor, in 1191 of the Samvat era; confirmed by the prince, his son, at the time of an eclipse of the moon in Srâvana 1200 Samvat. It appears from calculation that a lunar eclipse did occur at the time—*viz.*, on the 16th of July A.D. 1144, about  $9\frac{1}{2}$  P.M., apparent time at Ujjayani."

Now it is quite true, as Colebrooke says, that an eclipse of the moon did occur on the 16th July 1144, but that day was certainly not the full moon of Srâvana in that year. The true date was the 28th

<sup>\*</sup> Colebrooke's Essays, II, p. 264. He has used the erroneous equation of 56 instead of 57 to reduce the Samvat year to Christian reckoning.

July 1143, on which day was the full moon of Srâvana, and also a lunar eclipse. The following is the calculation according to the Tables. Samvat year 1200 + 3044 = 4244 Kâli-Yuga = A.D. 1143.

Solar Aharga <b>na</b> .	Luni-solar Arhargana.
4200 years = 1534,086.7772 days	s. 1488,341 6323 days.
44 years = 16,071.3852 "	15,592.1504 "
4244 years == 1550,158.1624 day	s. 1503,933 <sup>.</sup> 7827 days.
Deduct constant 2.1475	
Luni-solar ( 1503 933-7827	leaves 6 days over = Thursday, 25th March, O. S., for first day of solar year.
Ahargan ( 46.222-2322 1500 Lunations 44.296-8820	The full moon or Sråvana-Sudi 15th
	is the 133rd day of the Hindu year.
1926.3502	which, counted from Thursday the
1919-4882	25th March, gives 28th July A.D.
	1143, on which day there was an
6.86 = 7 days earlier 6.8620	eclipse of the moon.

In the North the luni-solar year begins with the new moon, or 1st day of *Chaitra-Sudi*, and as this is the latter half of the month, this Hindu year has the strange anomaly of beginning in the middle of a month. The first half of Chaitra, or the period of the waning moon, called *Badi*, or *Krishna Paksha*, belongs to the past year. This mode of placing the *Badi*, or waning half of the moon, in the beginning of the month is known as the *Krishnadi* reckoning; while the opposite practice of putting the *Sudi*, or *Sukla Paksha*, half of the moon, as the beginning of the month, is known as the *Sukladi* reckoning. The names *Badi* and *Sudi* are contractions of *bahula-paksha-dina*, the "day of the dark half," and *sukla-paksha-dina*, the "day of the bright half," the first and last syllables only being retained.

Table X shows the number of days in the Hindu luni-solar year when not intercalary. When the year is an intercalary one, and the day required falls later than the intercalary month, then 30 days must be added to the number given in the Table.

The years of intercalation being fixed by the rules laid down for the 19-year cycle, the name of the intercalated month has yet to be found. As there are 30 days in six of the lunar months, while the time of one lunation is only  $29\frac{1}{2}$  days, it would of course occasionally happen that two new moons would fall in the same month, one at the beginning, and the other at the end. But as this is not allowed, a

peculiar arrangement has been adopted for avoiding it. In whatever month two new moons would naturally fall, that month is doubled; or, in other words, an intercalary month of the same name is added called Adhika Vaisâkha, Adhika Srâvana, &c.

To ascertain which month will be Adhika, or intercalary, Warren's Kâla Sankalita should be consulted, and also the brief abstract given by Prinsep. The process is troublesome, and in the present work I have adopted the names of the intercalary months as given by Cowasji Patell. The years of the intercalations are shown to be correct by the shifting of the initial days backwards and forwards, all of which I have myself calculated. . • . • .

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#### TABLE I.

# CHRISTIAN CALENDAR.

Week Days for one year.

	s	Mo	Tu	W	Th	Fr	Sat	
	Mon	Tu	w	Th	Fr	Sat	ន	
D	Tu	w	Th	Fr	Sat	s	Mo	In
VYEARS	Wed	Th	Fr	Sat	s	Mo	Tu	LEAP YEARS the Months
be read s side.	Thu	Fr	Sat	s	Mo	Tu	w	are to be read on this side.
	Fri	Sa	s	Mo	Tu	w	Th●	
	Sat	S	Mo	Tu	w	ТЪ	Fr	
	1	2	3	4	5	6	7	
JARY	8	9	10	11	12	13	14	JANUARY
BER	15	16	17	18	19	20	21	APRIL
	22	23	2 <del>1</del>	25	26	27	28	JULY
	29	<b>3</b> 0	31		•••			
UARY		•••		1	2	3	4	
ксн	5	6	7	8	9	10	11	FEBRUARY
uп	12	13	14	15	16	17	18	AUGUST
MBER	19	20	21	22	23	24	25	
	26	27	28	29	30	31	•••	
			•••	•••			1	
RIL	2	3	4	5	6	7	8	SEPTEMBER.
LY	9	10	11	12	13	14	15 22	DECEMBER
	16	17	18	19 90	20	21	•	
	23	24	25	26	27	28	29	
_	30	31	 1	 2	 3	 4	 5	
			8	2 9	3 10	• 11	12	
UST	6 13	7	0 15	9 16	17	11	12	MAY
	20	14 21	22	23	24	25	26	
	20 27	28	29	23 30	31			
						 1	 2	
	 3	 4	5	6		8	9	
MBER	10	11	12	13	14	15	16	JUNE
MBER	17	18	19	20	21	22	23	JUMM
	24	25	26	27	28	29	30	
	31							
		1	2	3	4	5	6	
	7	8	9	10	11	12	13	
١Y	14	15	16	17	18	19	20	OCTOBER
	21	22	23	24	25	26	27	
	28	29	30	31				
					1	2	3	
	4	5	6	7	8	9	10	MADON
NE	11	12	13	14	15	16	17	MARCH
	18	19	20	21	22	23	2 <del>1</del>	NOVEMBER
	25	26	27	28	29	30	31	

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#### CHRISTIAN ERA.

# TABLE II. · JULIAN CALENDAR.

#### CHRISTIAN CENTURIES. B. C.

<b>C.</b>	3400 2700								OL	D /LE		0	100	200	300	400	500	600	
	25					1500 800			-	4		700	800	900	1000	1100	1200	1300	
	600	500	400	300	200	100	0	1.0	IRIS YEA	TIA RS.		1400	1500	1600	1700	1800	1900	2000	
C.	11		INIT	IAL I	AYS.	9							1	NITI	AL 1	DAYS			ľ
	Fr	Th	w	Tu	Mo	s	Sa	0	28	56	84	Th	w	Tu	Mo	s	Sa	Fr	ŀ
¥.	W	Tu	Mo	S	Sa	Fr	Th	1	29	57	85	Sa	Fr	Th	W	Tu	Mo	S	l
	Tu	Mo	S	Sa	Fr	Th	W	2	30	58	86	s	Sa	Fr	Th	W	Tu	Mo	I
	Mo	S	Sa	Fr	Th	W	Tu	3	31	59	87	Mo	S	Sa	Fr	Th	W	Tu	I
	s	Sa	Fr	Th	W	Tu	Mo	4	32	60	88	Tu	Mo	s	Sa	Fr	Th	W	I
¥.	Fr	Th	W	Tu	Mo	S	Sa	5	33	61	89	Th	W	Tu	Mo	S	Sa	Fr	ĺ
	Th	W	Tu	Mo	S	Sa	Fr	6	34	62	90	Fr	Th	W	Tu	Mo	S	Sa	I
	W	Tu	Mo	S	Sa	Fr	Th	7	35	63	91	Sa	Fr	Th	W	Tu	Mo	S	I
	Tu	M	S	Sa	Fr	Th	W	8	36	64	92	s	Sa	Fr	Th	W	Tu	Mo	l
Y.	S	Sa	Fr	Th	W	Tu	Mo	9	37	65	93	Tu	Mo	S	Sa	Fr	Th	W	I
	Sa	Fr	Th	W	Tu	Mo	S	10	38	66	94	w	Tu	Mo	S	Sa	Fr	Th	I
	Fr	Th	W	Tu	Mo	s	Sa	11	39	67	95	Th	W	Tu	Mo	S	Sa	Fr	I
	Th	W	Tu	M	S	Sa	Fr	12	40	68	96	Fr	Th	W	Tu	Mo	S	Sa	I
¥.	Tu	M	S	Sa	Fr	Th	W	13	41	69	97	S	Sa	Fr	Th	W	Tu	Mo	į
	Mo	S	Sa	Fr	Th	W	Tu	14	42	70	98	Mo	S	Sa	Fr	Th	W	Tu	
	s	Sa	Fr	Th	W	Tu	Mo	15	43	71	99	Tu	Mo	S	Sa	Fr	Th	W	
	Sa	Fr	Th	W	Tu	Mo	S	16	44	72	100	W	Tu	Mo	s	Sa	Fr	Th	
¥.	Th	W	Tu	Mo	s	Sa	Fr	17	45	73		Fr	Th	W	Tu	Mo	1.1	Sa	
	W	Tu	Mo	S	Sa	Fr	Th	18	46	74		Sa	Fr	Th	W	Tu	Mo	1.5.1	
	Tu	Mo	S	Sa	Fr	Th	W	19	47	75		s	Sa	Fr	Th	W	Tu	Mo	
	Mo	S	Sa	Fr	Th	W	Tu	20	48	76		Mo	S	Sa	Fr	Th	W	Tu	
Y.	Sa	Fr	Th	W	Tu	Mo	S	21	49	77		W	Tu	Mo	S	Sa	Fr	Th	
	Fr	Th	W	Tu	Mo	S	Sa	22	50	78		Th	W	Tu	Mo	S	Sa	Fr	
	Th	W	Tu	Mo	S	Sa	Fr	23	51	79		Fr	Th	W	Tu	Mo	S	Sa	
	W	Tu	Mo	S	Sa	Fr	Th	24	52	80		Sa.	Fr	Th	W	Tu	Mo	1.00	1
¥.	Mo	S	Sa	Fr	Th	W	Tu	25	53	81		Mo	S	Sa	Fr	Th	W	Tu	
	S	Sa	Fr	Th	W	Tu	Mo	26	54	82		Tu	Mo	S	Sa	Fr	Th	W	
	Sa	Fr	Th	W	Tu	Mo	S	27	55	83		W	Tu	Mo	S	Sa	Fr	Tb	1

#### CHRISTIAN ERA.

#### TABLE III.

GI	R	E	G	0	R	A	N	C	A	LE	N	D	A	R.	

CHRISTIAN CENTURIES. B. C.

A. D. CHRISTIAN CENTURIES.

B. C.	3100	3000	2900	2800		NE	EW		Sat.	Fri.	Wed.	Mon.	A
	2700	2600	2500	2400					0	100	200	300	
1	2300	2200	2100	.2000		ST	VLE		400	500	600	700	
	1900	1800	1700	1600					800	900	-1000	1100	
	1500	1400	1300	1200					1200	1300	1400	1500	
	1100	1000	900	800		-	-		1600	1700	1800	1900	
	700	600	500	400					2000	2100	2200	2300	
	300	200	100	0		CHRIS	STIAN		2400	2500	2600	2700	
B. C.	1	NITIAL	DAYS			YEA	RS.		1	NITIAI	DAYS		А.
	Sa	Th	Tu	Mo	-	28	56	Sa	Th	Tu	s	L.	
. Y.	Fr	W	Mo	Sa		29	57	84	Mo	Sa	Th	Tu	
	Th	1	S	F	2	30	58	85 86	Tu	S	Fr	W	1
	W	Tu Mo	Sa	Th	3	31	59	80	W	Mo	Sa	Th	
	Tu	S	Fr	W	3 4	32	60	87	Th	Tu	S	Fr	-
. Y.	S	1000	W	Mo	± 5	33	61	89	Sa	Th	Tu	S	L.
100	Sa	Fr Th	Tu	S	6	34	62	89 90	S	Fr	w	Mo	
100	Fr	W	Mo	Sa	7	35	63	91	Mo	Sa	Th	Tu	
	Th		S	Fr	8	36	64	92	Tu	S	Fr	w	-
.Y.	Tu	Tu	Fr	W	9	37	65	92	Th	Tu	S	Fr	L.
-	Mo	S	Th	Tu	10	38	66	94	Fr	W	Mo	Sa	
	S	Sa	W	Mo	11	39	67	95	Sa	Th	Tu	S	
	Sa	Fr	Tu	S	12	40	68	96	S	Fr	W	Mo	-
L.Y.	Th	Th	S	Fr	13	41	69	97	Tu	S	Fr	W	L.
-	W	Tu	Sn	Th	14	42	70	98	W	Mo	Sa	Th	
	Tu	Mo	Fr	W	15	43	71	99	Th	Tu	S	Fr	
	Mo	S	Th	Tu	16	44	72	100	Fr	W	Mo	Sa	-
LY	Sa	Sa	Tu	S	17	45	73	100	S	Fr	W	Mo	L.
	Fr		Mo	Sa	18	46	74		Mo	Sa	Th	Tu	
	Th	W	S	Fr	19	47	75		Tu	S	Fr	W	
	W	Tu Mo	Sa	Th	20	48	76		W	Mo	Sa	Th	L.
L.Y.	Mo	Mo	Th	Tu	20	49	77		Fr	W	Mo	Sa	14
	The second second		W	Mo	22	50	78		Sa	Th	Tu	S	
	S	Fr	100		22	100	79		S	Fr	W	Mo	
	Sa	Th	Tu	S	Sec. 1	51	1000		Mo	Sa	Th	Tu	-
L. Y.	Fr	W	Mo	Sa	24	52	80		W	Mo	Si	Th	L.
	W	Mo	Sa	Th	25	53	81		1. 1. 1. 1.	-	S	Fr	
	Tu	S	Fr	W	26	54	82		Th	Tu	Mo	Sa	
	Mo	Sa	Th	Tu	27	55	83		Fr	W	MO	DIA	

N. B.-The initial day of each even century, 400, 800, &c., is Saturday; that of the odd centuries is either Friday, Wednesday, or Monday, as noted at the head of the column.

#### CHRISTIAN ERA.

#### TABLE IV.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	1	32	60	91	121	152	182	213	244	27 <b>4</b>	305	335
2	2	33	61	92	122	153	183	214	245	275	806	336
3	3	34	62	93	123	154	184	215	246	276	307	337
4	4	35	63	94	124	155	185	216	247	277	308	338
Б	5	36	64	95	125	156	186	217	248	278	309	339
6	6	37	65	96	126	157	187	218	242	279	310	340
7	7	38	66	97	127	158	188	219	250	280	311	341
8	8	39	67	98	128	159	189	220	251	281	<b>312</b> ·	342
9	9	40	68	99	129	160	190	221	252	282	313	343
10	10	41	69	100	130	161	191	222	253	283	314	344
							.					
11	11	42	70	101	131	162	192	223	254	284	315	345
12	12	43	71	102	132	163	193	224	255	285	316	346
13	13	44	72	103	133	164	194	225	256	286	317	347
14	14	45	73	104	134	165	195	226	257	287	318	348
15	15	46	74	105	135	166	196	227	258	288	319	349
16	16	47	75	106	136	167	197	228	259	289	320	350
17	17	48	76	107	137	168	198	229	260	290	321	351
18	18	49	77	108	138	169	199	230	261	291	322	352
19	19	50	78	109	139	170	200	231	262	292	323	353
20	20	51	79	110	140	171	201	232	263	293	324	354
21	21	52	80	111	141	172	202	233	264	294	325	355
22	<b>2</b> 2	53	81	112	142	173	203	234	265	295	326	356
23	23	54	82	113	143	174	204	235	266	296	827	357
24	24	55	83	114	144	175	205	236	267	297	328	358
25	25	56	84	115	145	176	206	237	268	298	329	359
26	26	57	85	116	146	177	207	238	239	299	330	360
27	27	58	86	117	147	178	208	239	270	300	331	361
28	28	59	87	118	148	179	209	240	271	<b>3</b> 01 ·	332	362
29	29		88	119	149	180	210	241	272	302	833	863
30	30		89	120	150	181	211	242	273	303	334	364
31	31		90		151		212	243		304		365
								210		001		

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Number of Days in the CHRISTIAN Year.

# TABLE V. Attic calendar.

Omitted days in the Macedonian Cycle of 19 years.

Years of Cycle.	Huperberetaios.	Dios.	Apellaios.	Audunaios.	Peritios.	Dustros.	DIOSKOROS.	Xanthikos.	Artemisios.	Daisios.	Panemos.	Löos.	Gorpiaios.	No. of omitted days.	days. Length of year.
	1	н	ш	IV	v	vı	Emb	VП	vIII	IX	x	XI	XII		days.
1			3		6		-	9		12		15		5	350
п	18		21		24		-	27		30			3	6	354
E. m		6		9		12	Emb	15		18		21		6	38
IV	24		27		30				3		6		9	6	35
E. v		12		15		18	Emb	21		24		27		6	38
VI	30			3		6	-		9		12		15	6	354
VЦ		18		21		24	-		27		30			5	35
B. VIII	3		6		9		Emb	12		15		18		6	38
IX	21		24		27		-	30			3		6	6	35
x		9		12		15			18		21		24	6	354
E. XI		27		30			Emb	3		6		9		5	38
хп	12		15		18		_	21		24		27		6	35
E. XIII	30			3		6	Emb	9		12		15		6	38
XIV	18		21		24		-	27		30			3	6	35
xv		6		9		12			15		18		21	6	35
E. XVI		24		27		30	Emb			3		6		6	38
XVII	9		12		15		_	18		21		24		6	35
XVIII	27		30			3	_		6		9		22	õ	35
E. XIX		15		18		21	Emb		24		27		30	6	38
-			-	-			l numt								69

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#### TABLE VI.

#### INITIAL DATES

Of two Attic and Macedonian Cycles of Meton preceding the Era of the Seleukida. B.C. 348 to 330. B.C. 329 to 311.

	1	ATTIO.		MA	CEDONI	N.			ATTIC.		Ma	CEDONIA	я.
Olymp.	Year of Cycle.		B.C.	Year of Cycle.		B.O.	Olymp.	Year of Cycle.		<b>B.C.</b>	Year of Cycle.		B.C.
108.1	E. viii	19 June	348	i	12 Oct.	348	112.4	E. viii	19 Juno	*329	i	12 Oct.	<b>*</b> 329
2	ix	7 July	847	ii	2 Oct.	847	113.1	ix	7 July	328	ii	2 Oct.	328
3	x	27 Jane	ə 346	E. iii	21 Sep.	846	2	x	27 June	327	B. iii	21 Sep.	827
4	E. xi	15 June	• *345	iv	9 Oct.	*345	3	E. xi	16 June	326	įv	10 Oct.	32
109.1	xii	4 July	344	E. v	28 Sep.	344	4	xii	4 July	*325	E. v	28 Sep.	*52
2	E. xiii	23 June	<b>3</b> 43	vi	17 Oct.	343	114.1	E. xiii	23 June	324	vi	17 Oct.	32-
3	xiv	12 Jul <b>y</b>	342	vii	6 Oct.	342	2	xiv	12 July	823	<b>vi</b> i	6 Oct.	323
4	XF	30 June	• *341	E. <del>v</del> iii	26 Sep.	*341	3	xv	1 July	322	E. viii	27 Sep.	32
110.1	E. xvi	19 June	<b>3</b> 40	ix	13 Oct.	340	4	E. xvi	19 June	<b>*</b> 321	ix	13 Oct.	*321
2	xvii	8 Jul <b>y</b>	339	x	3 Oct.	339	115.1	xvii	8 July	<b>32</b> 0	x	8 Oct.	<b>B</b> 20
3	xviii	27 June	<b>8</b> 38	E. xi	23 Sep.	838	2	xviii	27 June	819	E. xi	23 Sep.	319
4	E. xix	16 June	*337	xii	11 Oct.	*337	3	E. xix	17 June	318	xii	12 Oct.	318
111.1	i	6 July	<b>3</b> 36	E. xiii	30 Sep.	336	4	i	6 July	*317	xiii	30 Sep.	-317
2	ii	26 June	335	xiv	19 Oct.	335	116.1	ii	26 June	316	xiv	19 Oct.	316
3	E. iii	15 June	ə 334	XV	8 Oct.	334	2	E. iii	15 June	815	XV	8 Oct.	31 <b>5</b>
4	iv	8 July	<b>*</b> 333	E. xvi	26 Sep.	*333	3	iv	4 July	314	xvi	27 Sep.	31 4
112.1	<b>E.</b> v.	22 June	832	<b>xv</b> ii	15 Oct.	332	4	E. v	22 June	*818	xvii	15 Oct.	•31 3
2	▼i	11 Jul <b>y</b>	<b>3</b> 31	xviii	4 Oct.	831	117.1	vi	11 Jul <b>y</b>	812	Sel. 1	4 Oct.	81 <b>Z</b>
3	vii	30 June	830	E. xix	24 Sep.	830	2	vii	30 June	311	2	24 Sep.	31 1

The 7th Attic year of Meton's Cycle ended at Midsummer, 310 B.C. ,\*. October 310 was in the 8th Attic year. \* The stars denote leap years of Julian reckoning.

Initial Days-CYCLE OF METON.

Days in Year.	Days Year in Year, Cycle.	An Sel	I CYCLR. B. C.	An Sel	II CYCLE, B. C.	An Sel	III CYCLB. B. C.	An	IV CYULE, B. C.	An Sel	V CYCLE. B. C.	An Sel	VI OYCLE. B. C.	An Sel	VII CYCLE	B C.
Days.														-		
355	I	00	13 Oct. 310	22	13 Oct. 291	41	13 Oct. 272	09	13 Oct. *253	61	14 Oct. 234	98	14 Oct. 215	117	14 Oct.	196
354	H	4	2 Oct. *309	23	3 Oct. 290	42	3 Oot. 271	61	3 Oct. 252	80	3 Oct. *233	66	4 Oct. 214	118	4 Oct.	195
384	E. iii	20	21 Sep. 308	24	21 Sep.*289	43	22 Sep. 270	62	22 Sep. 251	81	22 Sep. 232	100	22 Sep. *213	119	23 Sep.	194
354	AI	9	10 Oct. 307	20	10 Oct. 288	44	10 Oct. *269	63	11 Oct. 250	82	11 Oct. 231	101	11 Oct. 212	120	11 Oct.	*193
384 E.	E. V	4	29 Sep. 306	26	29 Sep. 287	45	29 Sep. 268	64	29 Sep.*249	83	30 Sep. 230	102	30 Sep. 211	121	30 Sep.	192
354	ia	30	17 Oct. *305	27	18 Oct. 286	46	18 Oct. 267	65	18 Oct. 248	84	18 Oct. *229	103	19 Oct. 210	122	19 Oct.	191
355	vii	6	6 Oct. 304	28	6 Oct. *285	47	7 Oct. 266	99	7 Oct. 247	85	7 Oct. 228	104	7 Oct. *209	123	8 Oct.	190
384	384 E. vili	10	26 Sep. 303	29	26 Sep. 284	48	26 Sep. *265	19	27 Sep. 246	86	27 Sep. 227	105	27 Sep. 208	124	27 Sep. *189	*189
354	ix	II	15 Oct. 302	30	15 Oct. 283	49	15 Oct. 264	68	15 Oct. *245	87	16 Oct. 226	106	16 Oct. 207	125	16 Oct.	188
354	×	12	3 Oct. *301	31	4 Oct. 282	50	4 Oct. 263	69	4 Oct. 244	88	4 Oct. *225	101	5 Oct. 206	126	5 Oct.	187
385 E.	E. xi	13	22 Sep. 300	32	22 Sep. *281	19	23 Sep. 262	20	23 Sep. 243	89	23 Sep. 224	108	23 Sep. *205	127	24 Sep.	186
364	xii	14	12 Oct. 299	33	12 Oct. 280	52	12 Oct. *261	11	13 Oct. 242	90	13 Oct. 223	109	13 Oct. 204	128	13 Oct.*185	*185
384	384 E. xiii	15	1 Oct. 298	34	1 Oct. 279	53	1 Oct. 260	72	1 Oct. *241	16	2 Oct. 222	110	2 Oct. 203	129	2 Oct.	184
354	AIX	16	19 Oct. *297	35	20 Oct. 278	54	20 Oct. 259	73	20 Oct. 240	92	20 Oct. *221	111	21 Oct. 202	130	21 Oct.	183
354	AX	17	8 Oct. 296	36	8 Oct. *277	55	9 Oct. 258	74	9 Oct. 239	93	9 Oct. 220	112	9 Oct. *201	131	10 Oct.	182
384	E. xvi	18	27 Sep. 295	37	27 Sep. 276	99	27 Sep. *257	15	28 Sep. 238	94	28 Sep. 219	113	28 Sep. 200	132	28 Sep.*181	181*
354	iivx	19	16 Oct. 294	38	16 Oct. 275	57	16 Oct. 256	26	16 Oct. *237	95	17 Oct. 218	114	17 Oct. 199	133	17 Oct.	180
355	xviii	20	4 Oct. *293	39	5 Oct. 274	58	5 Oct. 255	17	5 Oct. 236	96	5 Oct. *217	115	6 Oct. 198	134	6 Oct.	179
384	E. xix	21	24 Sep. 292	40	25 Sep. 273	69	25 Sep. 254	78	25 Sep. 235	2.6	25 Sep. 216	116	26 Sep.*197	135	26 Sep.	178
6,940	6,940 days in 19 years	n 19 y	care.			* The	* The stars denote leap years of Julian reckoning.	leap y	cars of Julian	recko	ning.					

SELEUKIDAN ERA.

103

TABLE VII.--(Contd.) SELEUKIDANERA.

SELEUKIDAN ERA. Initial Days-CYCLE OF METON.

SELEUKIDAN ERA.

# TABLE VII.- (Oontd.)

SELEUKIDAN ERA. Initial Days---CYCLE OF METON.

Ļ	F	Γ		AX			хvі			ΙΙΔΧ	-	n	ΙΊΙΔΧ	-		XIX			XX			IXX	
<u>Ã</u>	578	Years		CYCLE			CYOLE.			CYCLE.		-	CYCLE.			CYOLE.		-	CYCLE.			CYCLE.	
Å.	und in the second secon	Year, Cycle. Sel	An Sel		B. C.	An Sel	£	B. C.	An Sel	E	B. C.	An Sel	A	A. D.	Sel	Α.	D.	Sel	<b>V</b>	A D.	Sel	1	A. D.
lã	Days.																	•					
en	55	i	269	16 Oct.		288	16 Oct.	*25	307	17 Oct.	9	326	17 Oct.	14	315	17 Oct.	33	364	17 Oct.	#05	383	18 Oct.	11
60	354	::	270	6 Oct.	43	289	6 Oct.	24	308	6 Oct.	÷.	827	7 Oct.	15	346	7 Oct.	34	365	7 Oct.	53	384	7 Oct.	*72
es	84 1	iii	271	25 Sep.	42	-190	25 Sep.	23	309	25 Sep.	4	328	25 Sep.	*16	347	26 Sep.	35	366	26 Sep.	54	385	26 Sep.	73
ං 	54	iv	272	13 Oct.	lf.	291	14 Oct.	22	310	14 Oct.	ŝ	329	14 Oct.	17	348	14 Oct.	*36	367	15 Oct.	55	386	15 Oct.	14
60	384 E.	٨	273	2 Oct.	40	292	2 Oct.	*21	311	3 Oct.	61	330	3 Oct.	18	349	3 Oct.	37	368	3 Oct.	*56	387	4 Oct.	75
ன் 	54	٣i	274	21 Oct.	39	293	21 Oct.	20	312	21 Oct.	ľ.	331	22 Oct.	19	350	22 Oct.	38	369	22 Oct.	57	388	22 Oct.	*76
en i	55	vii	275	10 Oct.	38	294	10 Oct.	19	313	10 Oct.A.D.1	D.I	332	10 Oct	*20	3õ1	11 Oct.	39	370	11 Oct.	58	389	11 Oct.	77
en en	84 1	E. viii	276	29 Sep.	+37	295	30 Sep.	18	314	30 Sep.	5	333	30 Sep.	21	352	30 Sep.	0F.	371	1 Oct.	59	390	1 Oct.	78
	54	ï	277	18 Oct.	36	296	18 Oct.	+17	315	19 Oct	en	<b>33</b> 4	19 Oct.	22	353	19 Oct.	41	372	19 Oct.	•60	391	20 Oct.	61
	64	м	278	7 Oct.	35	297	7 Oct.	16	316	7 Oct.	+	335	8 Oct.	23	354	8 Oct.	42	373	8 Oct.	61	392	8 Oct.	*80
<b>ന</b>	85	385 E. xi	279	279 26 Sep.	34	298	26 Sep.	15	317	26 Sep.	5	336	26 Sep.	<b>†</b> 2 <b>+</b>	355	27 Sep.	43	374	27 Sep.	62	393	27 Sep.	81
eri T	364	xii	280	15 Oct.	*33	299	16 Oct.	14	318	16 Oct.	9	337	16 Oct.	25	356	16 Oct.	ŦŦ.	375	17 Oct.	63	394	17 Oct.	82
ന്	84 1	384 E. xiii	281	4 Oct.	32	300	4 Oct.	*13	319	5 Oct.	7	338	5 Oct.	26	357	5 Oct.	45	376	5 Oct.	<b>*</b> 64	395	6 Oct.	83
e0	54	xiv	282	23 Oct.	31	301	23 Oct.	12	320	23 Oct.	*	339	24 Oct.	27	358	24 Oct.	46	377	24 Oct.	65	396	24 Oct.	<del>1</del> 8*
8	54	A.	83	12 Oct.	30	302	12 Oct.	11	321	12 Oct.	6	340	12 Oct.	28	359	13 Oct.	11	378	13 Oct.	99	397	13 Oct.	85
ee P	84 1	E. xvi	84	30 Sep. 1	*29	303	1 Oct.	10	322	1 Oct.	10	341	1 Oct.	29	360	1 Oct.	<b>8</b> †•	379	2 Oct.	67	398	2 Oct.	86
_	54	354 xvii 2	285	19 Oct.	28	304	19 Oct.	6.	323	20 Oct.	11	342	20 Oct.	30	361	20 Oct.	49	380	20 Oct.	<b>*</b> 68	399	21 Oct.	87
<b>ෆ්</b>	55	<b>x</b> viii	286	8 Oct.	27	305	8 Oct.	80	324	8 Oct.	*12	343	9 Oct.	31	362	9 Oct.	50	381	9 Oct.	69	<b>8</b>	9 Oct.	<b>*</b> 88
<i>е</i> р	84 1	384 E. xix 2	287	287 28 Sep.	26	306	28 Sep.	7	325	28 Sep.	13	344	29 Sep.	*32	363	29 Sep.	51	382	29 Sep.	70	401	29 Sep.	89
<b>1</b> °	940	6,940 days in 19 years.	19 y	ears.					*	he stars	denot	te leap	The stars denote leap years of Julian reckoning.	Julia	n reck	oning.							

TABLE VII.-(Contd.)

# SELEUKIDAN ERA. Initial Days-CYCLE OF METON.

			VIII		IX		X		XI XI		XII			XIII	-		ΔІХ	
Days	Days Years in of	_	CYULE.	-	CYCLE.		CYCLE.	•	CYCLE.	-	CYCLE.			CYCLE.		-	CYCLE.	
Year.	Year. Cycle. Sel	Sel	B	Sel	B.C.	An Sel	B. C.	An Sel	B. C.	Sel	Ŕ	ಲ	An Sel	Ŕ	U U	An Sel	-	B. C.
Days.																-		
355		136	136 14 Oct. *177	155	15 Oct. 158	174	15 Oct. 139	193	15 Oct. 120	212	15 Oct. *101	101	231	16 Oct.	82	250	16 Oct.	63
354	ï	137	4 Oct. 176	156	4 Oct. *157	175	5 Oct. 138	194	5 Oct. 119	213	5 Oct. 1	100	232	5 Oct.	18*	251	6 Oct.	62
384	E. iii	138	23 Sep. 175	167	23 Sep. 156	176	23 Sep. *137	195	24 Sep. 118	214	24 Sep.	66	233	24 Sep.	80	252	24 Sep.	19*
364	iγ	139	12 Oct. 174	158	12 Oct. 155	177	12 Oct. 136	196	12 Oct. *117	215	13 Oct.	<b>86</b>	234	13 Oct.	79	253	13 Oct.	60
384	E. ∢	140	30 Sep.*173	159	1 Oct. 154	178	1 Oct. 135	197	1 Oct. 116	216	1 Oct. *	26.	235	2 Oct.	78	254	2 Oct.	69
354	vi	vi 141	19 Oct. 172	160	19 Oct. *153	179	20 Oct. 134	198	20 Oct. 115	217	20 Oct.	96	236	20 Oct.	$LL_*$	255	21 Oct.	89
355	vii	vii 142	8 Oct. 171	161	8 Oct. 152	180	8 Oct *133	199	9 Oct. 114	218	9 Oct.	95	237	9 Oct.	76	256	9 Oct.	+57
384	E. viii 143	143	28 Sep. 170	162	28 Sep. 151	181	28 Sep. 132	200	28 Sep.*113	219	29 Sep.	94	238	29 Sep.	75	257	29 Sep.	56
354	ix	144	16 Oct. 169	163	17 Oct. 150	182	17 Oct. 131	201	17 Oct. 112	220	17 Oct.	*93	239	18 Oct.	74	258	18 Oct.	55
354	н	145	5 Oct. 168	164	5 Oct. *149	183	6 Oct. 130	202	6 Oct. 111	221	6 Oct.	92	240	6 Oct.	*73	259	7 Oct.	54
386	E. xi	146	24 Sep. 167	165	24 Sep. 148	184	24 Sep. *129	203	25 Sep. 110	222	25 Sep.	16	241	25 Sep.	72	260	25 Sep.	*53
354	жü		147   14 Oct. 166	166	14 Oct. 147	185	14 Oct. 128	204	14 Oct. *109	223	15 Oct.	8	242	15 Oct.	71	261	15 Oot.	52
384	384 E. xiii	148	2 Oct. *165	167	3 Oct. 146	186	3 Oct. 127	205	3 Oct. 108	22 <del>1</del>	3 Oct.	•89	243	4 Oct.	70	262	4 Oct.	51
354	xiv	149	21 Oct. 164	168	21 Oct. *145	187	22 Oct. 126	206	22 Oct. 107	225	22 Oct.	88	244	22 Oct.	69 <b>.</b>	263	23 Oct.	50
354	X	150	10 Oct 163	169	10 Oct. 144	188	10 Oct. *125	207	11 Oct. 106	226	11 Oct.	87	245	11 Oct.	68	264	11 Oct.	6F*
384	E. xvi		151 29 Sep. 162	170	29 Sep. 143	189	29 Sep. 124	208	29 Sep.*105	227	30 Sep.	86	_	30 Sep.	67	265	30 Sep.	48
354	xvii	152	<b>xvii</b> 152 17 Oct. *161	171	18 Oct. 142	190	18 Oct. 123	209	18 Oct. 104	228	18 Oct. 4	85	247	19 Oct.	99	266	19 Oct.	47
355	жvііі	xviii 153	6 Oct. 160	172	6 Oct. *141	191	7 Oct. 122	210	7 Oct. 103	229	7 Oct.	84	248	7 Oct.	<b>*65</b>	267	8 Oct.	46
384	E. xix	154	384 E. xix 154 26 Sep. 159	178	26 Sep. 140	192	27 Sep.*121	211	27 Sep. 102	230	27 Sep.	83	240	27 Sep.	64	268	28 Sep.	9 <b>F</b> *
6,91(	6,940 days in 19 years.	n 19 y	CATA.			मृ. मृ.	s stars denote	leap y	* The stars denote leap years of Julian reckoning	recko	aing.							

SELEUKIDAN ERA.

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- CULARWAY TADUE VAL

SELEUKIDAN ERA.

Initial Days-CYCLE OF METON.

105

TABLE VII.-(Concld.) SELEUKIDAN ERA. Initial Days-CYCLE OF METON.

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			IIXX		ШХХ		ΧΧΙΥ		XXV		ΧΧ		ΙΙΔΧΧ		ΙΠΥΧ	
Days	Days Years in of		CYCLE.	-	CYCLE.		CYCLE.		CYCLE.	-	CYCLE	•	CYCLE.	-	UYCLE.	
Year.	Cycle	Sel	cle Sel A.D.	Sel	A. D.	Sel	A. D.	Sel .	<b>A.</b> D.	Sel	<b>A</b> . D.	An Sel	A. D.	Sel	A. D.	o.
355	•••	402	402 18 Oct. 90	421	18 Oct. 109	<del>1</del> 40	18 Oct. *128	459 1	19 Oct. 147	478	19 Oct. 166	497	19 Oct. 185	516	19 Oct. *204	4
354	ü	403	8 Oct. 91	422	8 Oct. 110	441	8 Oct. 129	460	8 Oct. *148	479	9 Oct. 167	498	9 Oct. 186	517	9 Oct. 205	5
384 E.	E. iii	404	26 Sep. *92	423	27 Sep. 111	442	27 Sep. 130	461 2	27 Sep. 149	480	27 Sep.*168	499	28 Sep. 187	518	28 Sep. 206	90
364	iv		405 15 Oct. 93	424	15 Oct. *112	443	16 Oct. 131	462 1	16 Oct. 150	481	16 Oct. 169	500	17 Oct.*188	619	17 Oct. 207	2
	Е. •	406	4 Oct. 94	425	4 Oct. 113	414	4 Oct. *132	463	5 Oct. 151	482	5 Oct. 170	501	5 Oct. 189	520	5 Oct. *208	8
304	vi	407	23 Oct. 95	426	23 Oct. 114	445	23 Oct. 133	464 2	23 Oct. *152	483	24 Oct. 171	502	24 Oct. 190	521	24 Oct. 209	6
355	μ	<del>1</del> 08	11 Oct. *96	427	12 Oct. 115	446	12 Oct. 134	465 1	12 Oct. 153	181	12 Oct. *172	503	13 Oct. 191	522	13 Oct. 210	0
384	384 E. viii	409	1 Oct.	428	1 Oct. *116	447	2 Oct. 135	466	2 Oct. 151	185	2 Oct. 173	102	3 Oct. *192	523	3 Oct. 211	-
354	ix	410	20 Oct. 98	429	20 Oct. 117	418	20 Oct. *136	467 2	21 Oct. 155	486	21 Oct. 174	505	21 Oct. 193	524	21 Oct. *212	2
364	x	411	9 Oct.	<del>1</del> 30	9 Oct. 118	<b>6</b> ††	9 Oct. 137	468	9 Oct.*156	487	10 Oct. 175	<b>5</b> 06	10 Oct. 194	523	10 Oct. 213	3
385 E.		_	412 27 Sep.*100	431	28 Sep. 119	450	28 Sep. 138	469 2	28 Sep. 157	488	28 Sep.*176	507	29 Sep. 195	526	29 Sep. 214	14
354	xii		413 17 Oct. 101	432	17 Oct. *120	451	18 Oct. 139	470	18 Oct. 158	<b>189</b>	18 Oct. 177	508	18 Oct. *196	527	19 Oct. 215	5
884	884 E. xiii	_	6 Oct. 102	433	6 Oct. 121	452	6 Oct. *140	471	7 Oct. 159	490	7 Oct. 178	603	7 Oct. 197	528	7 Oct. *216	16
354	xiv	415	25 Oct. 103	434	25 Oct. 122	453	25 Oct. 141	472 5	25 Oct. *160	491	26 Oct. 179	510	26 Oct. 198	529	26 Oct. 217	5
354	XΥ		416 13 Oct. *104	435	14 Oct. 123	454	14 Oct. 142	473 1	14 Oct. 151	492	14 Oct.*180	511	15 Oct. 199	530	15 Oct. 218	18
384	384 E. xvi		2 Oct. 105	436	2 Oct. *124	455	3 Oct. 143	474	3 Oct. 162	493	3 Oct. 181	512	3 Oct. *200	631	4 Oct. 21	219
354	Xvii		418 21 Oct. 106	437	21 Oct. 125	456	21 Oct. *144	475 2	22 Oct. 163	<b>1</b> 01	22 Oct. 182	513	22 Oct. 201	632	22 Oct. *220	ຊ
355	Xviii	419	419 10 Oct. 107	438	10 Oct. 126	457	10 Oct. 145	476 1	10 Oct. *164	495	11 Oct. 183	514	11 Oct. 202	533	11 Oct. 221	21
384	E. xix	420	384 E. xix 420 30 Sep.*108	439	30 Sep. 127	458	30 Sep. 146	477 3	30 Sep. 165	496	1 Oct.*184	515	1 Oct. 203	534	1 Oot. 25	222
10 Y	£ 010 Ånur (n 10 mnur	. 10				÷ •	<ul> <li>The stars denote luan</li> </ul>	1	aare nê Tullân							ĺ

SELEUKIDAN ERA.

106

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# TABLE VIII.

Number of days in the Hindu SOLAR year.

-	_	_	_		_							
Days.	Vaisakha.	Jyeshtha.	Ashâdha.	Brâvana.	Bhâdra.	Aswina.	Kârtika.	Agrahayana.	Pausha.	Mâgha.	Phâlguna.	Chaitra.
1	1	32	63	95	126	157	188	218	247	277	306	336
2	2	33	64	96	120	158	189	219	241	278	307	337
3	3	34	65	97	128	159	190	220	249	279	308	338
4	4	35	66	98	129	160	191	221	<b>2</b> 50	280	309	339
5	5	36	67	99	130	161	192	222	251	281	<b>310</b>	340
6	6	37	68	100	131	162	193	223	252	282	311	341
7	7	38	69	101	132	163	194	224	253	283	31 <b>2</b>	342
8	8	39	70	102	133	164	195	225	254	284	31 <b>3</b>	843
9	9	40	71	103	134	165	196	226	255	285	314	844
10	10	41	72	104	135	166	197	227	256	286	315	345
							Į					
								l				
11	11	42	73	105	136	167	198	228	257	287	316	346
12	12	43	74	106	137	168	199	229	258	288	317	347
13	13	44	75	107	138	169	200	230	259	289	318	348
14	14	45	76	108	139	170	201	231	260	290	319	349
15	15	46	77	109	140	171	202	232	261	291	320	350
16	16	47	78	110	141	172	203	233	262	292	321	351
17	17	48	79	111	142	173	204	234	263	293	322	852
18	18	49	80	112	143	174	205	235	264	294	323	353
19	19	50	81	113	144	175	206	236	265	295	824	354
20	20	51	82	114	145	176	207	237	266	296	325	355
					1							
21	21	52	83	115	146	177	208	238	267	297	326	356
22	22	53	84	116	147	178	209	239	268	298	327	357
23	23	54	85	117	148	179	210	240	269	299	328	358
24	24	55	86	118	149	180	211	241	270	300	329	359
25	25	56	87	119	150	181	212	242	271	301	330	360
26	26	57	88	120	151	182	218	243	272	302	331	361
27	27	58	89	121	152	183	214	244	273	303	332	362
28	28	59	90	122	153	184	215	245	274	<b>304</b>	333	363
29	29	60	91	123	154	185	216	246	275	305	334	364
80	30	61	92	124	155	186	217		276		335	365
31	31	62	93	125	156	187						
32			94									•••
	1			1			l 	1				

# TABLE IX.

# Approximate Initial dates of Hindu SOLAR years.

#### JULIAN.

#### GREGORIAN.

B. C.	3110	16 February.	B. C.	3100	20 January.	B. C.
	070-	10	1.01231	3000	21	1
	2765	19 —	1.1	1500	16 February.	
	1615	1 March.		1200	21	
	1385			900	26	
	1385	3		720	1 March.	
•	925	7		360	7	1
	580	10		60	12	1
	580	10	0.25-1		13	
	350	12	A. D.	60	14	A. D.
B. C.	10	15	1.5	120	15	1
			the set	180	16	1
A. D.	105	16 —		240	17	1
	220	17		300 360	18 <u></u> 19 <u></u>	1
	1.65		1	420	20	
	335	18 —		420	21	
	450	19		540	22	1
	1.20			600	23	
	565	20	N 11	660	24	1
	680	21		720	25	1
	FOR			780	26	1
	795	22		840	27	1
	910	23		900	28	
1	1025		1. I	960	29	
	1020	24		1020	30 —	
	1140	25		1080	31	1
	1255			1140	1 April.	1
	1200	26		1200	2	
	1370	27		1260 1320	3	
	1485	28		1320	5	
	1.1.1.1.1	20		1440	6	1
	1600	29		1500	7	
	1715	30		1560	8	
	1110	50		1620	9 <u>-</u> 10 <u>-</u>	
	1830	31		1680 1740	10	1
	1945	1 April.		1800	12	
	1010			1860	13	
	2060	2		1920	14	1

# TABLE X.

	1			1	1	1	i	1	1	1.	1	[	
BADI.	Chaitra.	Vaisâkha.	Jyeshtha.	Аврадда.	Sråvana.	Bhâdra.	Aswina.	Kårtika.	Agrahay.	Paush.	Mâgha.	Phâlgun.	Chaitra.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	75 76 77 78 79 80 81 82 83 84 85 86 87 88 89	104 105 106 107 108 109 110 111 112 113 114 115 116 117 118	134 135 136 187 138 139 140 141 142 143 144 145 146 147 148	163 164 165 166 167 168 169 170 171 172 173 174 175 176 177	193 194 195 196 197 198 199 200 201 202 203 204 205 206 207	222 223 224 225 226 227 228 229 230 231 232 233 234 235 236	252 253 254 255 256 257 258 259 260 261 262 263 264 265 266	281 282 283 284 285 286 287 288 289 290 291 292 293 294 295	311 312 313 314 315 316 317 318 319 320 321 322 323 324 325	840 841 342 343 344 845 346 347 348 349 350 351 352 853 854
SUDI 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	1 2 8 4 5 6 7 8 9 10 11 12 13 14 15	31 32 33 34 85 36 87 38 39 40 41 42 43 44 	60 61 62 63 64 65 66 67 68 69 70 71 72 73 74	90 91 92 93 94 95 96 97 98 99 100 101 102 103 	119 120 121 122 123 124 125 126 127 128 129 130 131 132 133	149 150 151 152 153 154 155 156 157 158 159 160 161 162 	178 179 180 181 182 183 184 185 186 187 188 189 190 191 192	208 209 210 211 212 213 214 215 216 217 218 219 220 221 	287 238 239 240 241 242 243 244 245 246 247 248 249 250 251	267 268 269 270 271 272 273 274 275 276 277 278 279 280 	296 297 298 299 300 301 302 303 304 305 306 307 308 309 310	326 327 328 329 330 831 332 833 834 335 336 337 338 339 	

Number of days in the Hindu LUNI-SOLAR year.

# TABLE XI.

# Solar Ahargana of ARYA-BHATA.

Years.	Days.	o	Years.	Days.
1	365·2587		34	12,418.7948
2	730 5174		35	12,784-0535
3	1,095.7760		36	13,149-3124
4	1,461-0347		37	13,514.5711
5	1,826-2934		38	13,879-8297
6	<b>2</b> ,191·5521		39	14,245-0884
7	2,556.8108		40	14,610 3476
8	2,922·0694		41	. 14,975-6059
9	3,287-3281		42	15,340-8648
10	3,652.5868		43	15,706-1234
11	<b>4</b> ,017 <sup>.</sup> 8455		44	16,071.3820
12	4,383.1042		45	16, <b>436</b> ·6407
12	4,748.3629		46	16,801-8994
13	5,113.6216		40 47	17,167.1581
15	5,478.7802		48	17,532.4168
16	5,844.1388		49	17,897-6654
10	6,209.3974		13 50	18,262-9340
18	6,574.6562		50 51	18,628.1926
10	6,939.9149		52	18,993.4516
20	7,305.1736		53	19,358.7103
20	7,670 4324		54	19,723.9686
22	8,035.6910		55	20,089.2272
23	8,400-9497		56	20,454 4860
24	8,766-2084		57	20,819.7450
25	9,131.4670		58	21,185-0036
. 26	9,496.7256		59	21,550-2622
27	9,861-9843		60	21,915.5208
. 28	10,227-2482		61	22,280.7795
. 29	10,592.5018		62	22,646 0382
<b>3</b> 0	10,957-7604		63	23,011-2968
31	11,323-0191		64	23,376·5554
. 32	11,688-2777		65	23,741.8140
83	12,053-5363		66	24,107-0726

#### TABLE XI.-(Continued).

# Solar Ahargana of ARYA-BHATA.

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Years.	Days.	⊙	Years.	Days.
67	24,472 3316		100	36,525.8680
68	24,837.5903		200	73,051.7513
69	25,202.8489		300	109,577.6042
70	25,568 2076		400	146,103.4722
71	25,933·3662		500	182,629· <b>34</b> 03
72	26,298.6248		600	219,155 <sup>.</sup> 2083
73	26,663.8834		700	255,681.0764
74	27,029.1422		800	292,206·9 <b>44</b> 4
75	27,394·4010		900	328,732·8124
76	27,759.6594		1000	365,258 <sup>.</sup> 6805
77	<b>28,124</b> ·9181		2000	730,517·3611
78	28,490.1768		3000	1.095,776-0417
79	28,855 4355		3100	1.132,301.9097
80	29,220 6944		3200	1.168,827.7777
81	<b>29,585</b> .9530		3300	1.205,353.6457
82	<b>29,951</b> ·2118		3400	1241,879 <sup>.</sup> 51 <b>37</b>
83	30,316.4705		3500	1,278,405.3817
84	30,681.7296		3600	1314,931-2498
85	31,046.9883		3700	1351,457.1178
86	31,412.2468		3800	1387 <b>,982</b> ·9858
87	31,777· <b>5</b> 054		3900	1424,508·8538
88	82,142.7640		4000	1.461,034.7222
89	32,508.0226		4100	1.497,560·5902
90	32,873-2812		4200	1.534,086.4582
91	33,238-5398		4300	1.570,612.3264
92	33,603.7985		4400	1607,138.1944
13	33,969-0571		4500	1643,664.0627
94	84,334 3162		4600	1680,189 9304
95	34,699 5749		4700	1716,715.7984
96	35,064.8336		4800	1753,241.6664
97	35,430-0922		4900	1789,767.5344
98	35,795.3308		5000	1.826,293.4027
99	36,160.5894	1	5100	1.862,819.2707

#### TABLE XII.

# Solar Ahargana of SURYA-SIDDHANTA.

Years.	Days.	Θ	Years.	Days.
1	365-2587		34	12,418.7977
2	730 <sup>.</sup> 5175		35	12,784 0564
8	1,095·776 <b>3</b>		86	13,149-3152
4	1,461-0350		87	13,514·57 <b>39</b>
5	1,826 <sup>.</sup> 2938		38	13,87 <b>9·8327</b>
6	2,191 .5525		39	14,245.0915
7	2,556 <sup>.</sup> 8113		40	14,610 3502
8	2,922-0700		41	14,975.6090
9	3,287.3288		42	15,340.8677
10	3,652.5876		43	15,706.1265
11	4,017.8463		44	16,071.3852
12	4,383.1051		45	16,436.6440
13	4,748-3638		46	16,801-9027
14	5,113.6226		47	17,167 1615
15	5,478-8813		48	17,532 4203
16	5,844.1401		49	17,897.6790
17	6,209.3988		50	18,262.9378
18	6,574.6576		51	18,628 1966
19	6,939 9163		52	18.993 4553
20	7,305.1751		53	19,858.7140
21	7,670.4339		54	19,723-9728
22	8,035.6926		55	20,089-2315
23	8,400.9514		50	20,454-4905
24	8,766·2101		56 57	20,819.7491
25	9,131-4689		57	21,185-0078
26	9,496.7276		59	21,550-2666
20	9,861 ·9864		60	21,915 <sup>.</sup> 525 <del>4</del>
28	10,227.2451		61	21,918 8284 22,280 7841
29	10,602.5039		62	22,280 7841
80	10,957.7627		63	22,040 0428 23,011·3016
81	11,323.0214		64	23,376·5604
82	11,688-2802		65	23,7 <b>4</b> 1·8191
83	12,053.5389		66	24,107-0778
	,			aritat Atta
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#### TABLE XII.-(Continued.)

# Solar Ahargana of SURYA-SIDDHANTA.

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Years.	Days.	o	Years.	Days.
67	24,472.3366		100	36,525.8756
68	24,837.5954		200	73,051.7513
69	25,202.8542		300	109,577-6269
70	25,568.1129		400	146,103.5026
71	25,933.3717		500	182,629.8782
72	26,298.6304		600	219,155 <sup>.</sup> 2539
73	26,663.8892		700	255,681·1295
74	27,029 1479		800	292,207-005 <b>2</b>
75	27,394.4067		900	328,732.8808
76	27,759.6654		1000	<b>36</b> 5,258·7565
77	28,124 9241		2000	730,517·51 <b>30</b>
				1 005 555-0604
78	28,490 1830		3000	1,095,776-2694
79	28,855.4417		. 3100	1,132,302.1451
80	29,220-7004		3200	1,168,828 0207
81	29,585 9592		3300	1,205,35 <b>3</b> ·89 <b>64</b>
82	<b>29,951 · 2180</b>		3400	1.241,879.7720
83	<b>3</b> 0,316·4767		3500	1,278,405.6477
84	80,681.7354		3600	1,314,931-5233
85	31,046.9942		3700	1,351,457.3990
86	81,412.2530		3800	1,387,983•2746
87	81.777.5117		3900	1,424,509-150 <b>3</b>
88	32,142.7704		4000	1,461,035 0259
89	32,508-0292		4100	1,497,560.9016
90	32,873 2880		4200	1,534,086.7772
91	83.238 <sup>.</sup> 5467		4300	1,570,612.6528
92	33,603·8054		4400	1,607,188-5285
93	33,969-0642		4500	1,643,664-4042
94	34,334 3230		4600	1,680,190 2798
95	<b>34,699</b> •581 <b>8</b>		4700	1,716,716.1555
96	35,064·8406		4800	1,753,242-0311
97	85,430 0993		4900	1,789,767-9067
98	<b>35,79</b> 5·3580		5000	1,826,293.7824
99	36,160-6168		5100	1,862,819.6580

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#### TABLE XIII.

1			· · ·	
Years.	Days.	©	Yean.	Days.
1	354:3670		34	12,048-4796
2 ;	708-7341		35	12,402-8466
3	1,063.1012		36	12,757-2136
4	1,417-4682		37 -	13,111-5806
5	1,771-8353		38	13,465-9476
6	2,126-2023		39	13,820-3146
7	2,480 5694		40	14,174-6822
8	2,834-9364		41	14,529-0492
9	3,189-3035		42	14,883-4164
10	3,543.6706		43	15,237-7834
11	3,898-0376		44	15,592-1504
12	<b>4,252·4046</b>		45	15, <b>946</b> ·5175
13	4,606.7716		46	16,300-8844
14	4,961.1388		47	16,655-2514
15	5,315 <sup>.</sup> 5058		48	17,009-6184
16	5,669 <sup>.</sup> 8728		49	17,363-9854
17	6,024-2398		50	17,718-3528
18	6,378.6068		51	18,072.7198
19	6,732 <sup>.</sup> 9738		52	18,427-0864
20	7,087.3412		53	18,781-4534
21	7,441 7082		54	19,135-8210
22	7,796 0752		55	19,490-1880
23	8,150-4422		56	19,844-55 <b>53</b>
24	8,504·8092		57	20,198 9222
25	8,859·1765		58	20,553-2892
26	9,213·5432		59	20,907-6563
27	9,567·9105		60	21,262.0233
28	9,922·27 <b>76</b>		61	21,616.3902
29	10,276 <sup>.</sup> 6446		62	21,970-7572
30	10,631-0116		63	22,325.1243
31	10,98 <b>5·3786</b>		64	22,679.4913
82	11,339.7456		65	23,033·8582
83	11,694.1128		66	23,388 <sup>.</sup> 2256
			1	• • • •

# Luni-Solar Ahargana.—SURYA-SIDDHASTA.

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#### TABLE XIII.-(Continued.)

# Luni-Solar Ahargana.—SURYA-SIDDHANTA.

\_\_\_\_\_

Years.	Days.	⊙	Years.	Days.
67	23,742.5922		100	35,436.7085
68	24,096.9592		200	70,873.4111
69	24,451.3262		300	106,310-1166
70	24,805·6939		400	141,746.8221
71	25,160.0609		500	177,183.5277
72	25,514.4276		600	212,620 2332
73	25,868.7946		700	248,056 9387
74	26,223.1612		800	283,493.6443
75	26,577.5295		900	318,930-3498
76	26,931.8952		1000	354, <b>367</b> .0553
77	27,286.2622		2000	708,7 <b>8</b> 4·110 <b>7</b>
78	27,640-6292		3000	1,063,101.1660
79	27,994.9962		8100	1,098,537.8715
80	28,349.3644		3200	1,133,974.5770
81	28,703.7814		3300	1,169,411.2826
82	29,058.0984		3400	1,204,847 9886
83	29,412·4654	1	3500	1,240,284.6941
84	29,766.8328		3600	1,275,721·3997
85	30,121.1998		3700	1,311,158.1047
86	30,475·5668		3800	1,346,594·8102
87	30,829.9338		3900	1,382,031 5157
88	31,18 <del>4</del> ·3008		4000	1,417,468-2213
89	31,538·6678		4100	1,452,904-9268
90	31,893.0349		4200	1,488,341 6323
91	32,247.4019		4300	1,523,778-3379
92	32,601.7688		4400	1,559,215 0434
93	32,956.1358		4500	1,594,651.7489
94	33,310.5028		4600	1,630,088.4545
95	33,664.8698		4700	1,665,525.1690
96	34,019.2368		4800	1,700,961 8655
97	34,373.6038		4900	1,736,398.5710
98	34,727.9708		5000	1,771,835.2766
99	35,082.3378	1	5100	1,807,271-9821

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#### TABLE XIV.

# LUNATIONS.

Number.	Days.	Number.	Days.
1	29.5306	84	1,004-0402
2	<b>59</b> ·0612	35	1,033.5705
3	88·5918	86	1,063.1011
4	118-1224	87	1,092 6317
б	147.6529	38	1,122.1626
6	177.1835	39	1,151.6932
7	206.7141	40	1,181.2235
8	236-2447	41	1,210.7541
9	265·7753	42	1,240-2846
10	295·3058	43	1,269.8152
11	<b>\$2</b> 4 <b>·8</b> 36 <b>4</b>	44	1,299 <sup>.</sup> 3456
12	<b>354</b> ·3670	45	1,328·876 <b>2</b>
18	<b>38</b> 3·8976	46	1,358.4068
14	413-4282	47	1,387.9374
15	442.9587	48	1,417.4682
16	<b>4</b> 72·489 <b>4</b>	49	1,446.9988
17	<b>502</b> ·0201	50	1,476.5294
18	531.5508	51	1,506-0600
19	561-0813	52	1,535.5904
20	<b>5</b> 90 <sup>.</sup> 6117	53	1,565-1210
21	620-1423	54	1,594.6524
22	649·6728	55	1,624·18 <b>30</b>
23	<b>6</b> 79·203 <del>4</del>	56	1,653.7128
24	708.7341	57	1,683.2434
25	788-2647	58	1,712-7740
26	767.7952	69	1,742.3046
27	<b>797·3262</b>	60	1,771.8353
28	826·8564	61	1,801.3659
29	856-3870	62	1,830-8964
80	<b>885</b> .9176	63	1,860-4270
81	915-4482	64	1,889.9576
82	944-9788	65	1,919.4882
83	974.5094	66	1,949-0188

# TABLE XIV.--(Continued.)

# LUNATIONS.

lumber.	Days.	(	Number.	Days.
67	2,978.5493		100	2,953-0588
68	2,008.0801		200	<b>5,</b> 906·1176
69	2,037.6106		300	8,859 <sup>.</sup> 2764
70	2,067.1411		400	11,812.2352
71	2,096.6716		500	14,765·2940
72	2,126.2023		600	17,718·3527
73	2,155.7329		700	20,671· <b>±</b> 115
74	2,185.2634		800	23,624-4703
75	2,214.7940		900	<b>26,577</b> ·5291
76	2,244.3245		1000	<b>2</b> 9,5 <b>3</b> 0-587 <b>9</b>
77	<b>2,</b> 273 <sup>.</sup> 8551		1100	<b>82,</b> 483 <sup>.</sup> 6467
78	<b>2,</b> 303·3858		1200	85,436.7054
79	2,332·9164		1300	38,389.7642
80	2,362.4470		1400	41,842.8230
81	2,391.9776		1500	<b>44,295</b> ·8820
82	<b>2,4</b> 21·5082		1600	47,248 <sup>.</sup> 9406
83	2,451.0388		1700	<b>5</b> 0,201 <sup>.</sup> 9994
84	2,480.5692		1800	<b>53,155 0582</b>
85	<b>2,</b> 510.0998		1900	<b>5</b> 6,108·1170
86	2,539.6304		2000	<b>5</b> 9,061·1759
87	<b>2,</b> 569·1610		2100	62,014·2347
88	2,598.6912		2200	<b>64,967</b> ·2935
89	<b>2</b> ,628·2 <b>2</b> 18		2300	67,920.3523
90	2,657.7529		2400	70,873-4108
91	2,687.2835		2500	73,826 4700
92	2,716.8136		2600	76,779.5284
93	2,746.3442		2700	79,732.5873
94	2,775.9748		2800	82,685 6460
95	<b>2,</b> 805·5054		2900	85,638.7049
96	2,834 <sup>.</sup> 9364		3000	88,591.7638
97	2,864-4670		4000	118,122.3517
98	2,893.9976		5000	147,652.9397
99	2,923.5282		6000	177,183-5276

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#### TABLE XV.

# HIJRA CALENDAR.

Months and Days of the Hijra Year.

		s	Mo	Tu	We	Th	Fr	Sa	s	Mo	Tu	We	Th	Fr	Sa	
		Mo	Tu	We	Th	Fr	Sa	s	Mo	Tu	We	Th	Fr	Sa	S	
		Tu	We	Th	Fr	Sa	s	Mo	Tu	We	Th	Fr	Sa	s	Mo	
		We	Th	Fr	Sa	s	Mo	Tu	We	Th	Fr	Sa	s	Mo	Tu	
		Th	Fr	Sa	s	Mo	Tu	We	Th	Fr	Sa	S	Mo	Tu	We	
		Fr	Sa	s	Mo	Tu	We	Th	Fr	Sa	s	Mo	Tu	We	Th	
		Sa	S	Mo	Tu	We	Th	Fr	Sa	s	Mo	Tu	We	Th	Fr	1.1
MONTHS.		-			-	-	-		-	-	-	-	-		-	WEE
Muharram	•••	1	2	3	4	5	6	7	8	9	10	11	12	13	14	2
		15	16	17	18	19	20	21	22	23	24	25	26	27	28	4
Safar	•••	29	30	1	2	3	4	5	6	7	8	9	10	11	12	6
		13	14	15	16	17	18	19	20	21	22	23	24	25	26	8
Rabia I		27	28	29	1	2	3	4	5	6	7	8	9	10	11	10
		12	13	14	15	16	17	18	19	20	21	22	23	24	25	12
Rabia II		26	27	28	29	30	1	2	3	4	5	6	7	8	9	14
		10	11	12	13	14	15	16	17	18	19	20	21	22	23	16
Jamâdi I		24	25	26	27	28	29	1	2	3	4	õ	6	7	8	18
		9	10	11	12	13	14	15	16	17	18	19	20	21	22	20
Jamâdi II		23	24	25	26	27	28	29	30	1	2	3	4	5	6	22
		7	8	9	10	11	12	13	14	15	16	17	18	19	20	24
Rajab		21	22	23	24	25	26	27	28	29	1	2	3	4	5	26
		6	7	8	9	10	11	12	13	14	15	16	17	18	19	28
Shabân		20	21	22	23	24	25	26	27	28	29	30	1	2	3	30
		4	5	6	7	8	9	10	11	12	13	14	15	16	17	32
Ramzân		18	19	20	21	22	23	24	25	26	27	28	29	1	2	34
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	36
		17	18	19	20	21	22	23	24	25	26	27	28	29	30	38
Shawâl		1	2	3	4	5	6	7	8	9	10	n	12	13	14	40
		15	16	17	18	19	20	21	22	23	24	25	26	27	28	42
Zilhada		29	1	2	3	4	5	6	7	8	9	10	11	12	13	44
		14	15	16	17	18	19	20	21	22	23	24	25	26	27	46
Zilhajja		28	29	30	1	2	3	4	5	6	7	8	9	10	11	48
		12	13	14	15	16	17	18	19	20	21	22	23	24	25	50
		26	27	28	29	30										

N.B.-Zilhajja has 30 days in Intercalary Years only.

# TABLE XVI.

# HIJRA CALENDAR.

Initial Days of Hijra Years.

	I—C3	YCLE.			II-OYCLE.						III-CYCLE			1.	
	ulin A.D. I	nitial	Days.		Hijra.	A.D.	Init	ial	Days.	-	Hijra.	A.D.	Init	ial	Days.
11	1 622 F 2 623 T 3 624 S		July  June	п	31 32 33	652	2	24 12 2	Aug 	п	61 62 63	680 681 682		1 20 10	 Sep
v		lo 2 a 23	  May	v	34 35 36	656	Sa Th	22 11 30	July  June	v	64 65 66	100	Th Tu	30 18 8	Aug 
VII :	7 628 W 8 629 M 9 630 F	lo 1	  Mav	vii *	37 38 39	658	Mo Sa We	19 9 29	May	. VII	67 68 69	1000	100	28 18 6	July
x	10 631 T			x	40	1 COLOR	0.00	17		X	70	1000	1000	25	June
	11 632 S		Mar		41		Fr	7 26	May April		71 72	1000	We	15	
XIII	13 634 M 14 635 S	ia 25	 Feb	XIII	43 44	664	Sa	15 4		XIII	73 74	693	Tu	23 13	May
XVI	15 636 V 16 637 S 17 638 F	5 2	 Jan	XVI	40	666	Mo Fr We	24 13 3	Mar	XVI	75	698	Sa We Mo		April
VIII *	18 639 T 19 640 S	Cu 12		xviii •	48	668	Fr	20 9	Feb	xviii	78	691	Fr We	100	Mar 
	20 1	Ch 21	Dec		5(	670	Tu	29	Jan		80	699	S	9	
XXI	22 642 8	Mo 10 Sa 30	 Nov	XXI	51 55	671	Sa Tu	18 8		XXI	81 82	2 70	10.00	15	Feb
XIV	23 643 V 24 644 S 25 645 H		 Oct	XXIV	5	673	Mo Fr We	16	Dec	XXIV	81 84 81	1 70	2 Sa 3 We 4 Mo		Jan
XVI.	CONTRACTOR OF	Fu 17		XXVI	5	6 67	5 S 6 Fr	25 14		XXVI		5 70	Fr	2	 Dec
CXIX	and the second s		Sep	XXIX	51 51 61	9 67	7 Tu 8 Sa 9 Th	3 23	Oct	XXIX	81 81 91	9 70	6 S 7 Th 8 Tu	12 1 20	  Nov
	0000							10			Ľ				

# TABLE XVI.-(Continued.)

# HIJRA CALENDAR.

# Initial Days of Hijra Years.

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		IV	-CY	CLI	G.			<b>V</b>	CY	CLI	G.			VI-	-ന
	Hijra.	<b>A</b> .D.	Ini	tial	Days.		Hijra.	<b>A</b> .D.	Ini	itial	Days.		Hijra.	A.D.	In
<b>11</b>	91 92 93	711	We Mo	19	Oct 	11	121 122 123	740	Mo Sa	7 26	Dec  Nov	п	151 152 153	768 769 770	Sa Th
v	· 94 95 96	712 713 714	Tu	7 26 16	 Sep 	v	124 125 126	742	We S Fr	4	  Oct	v	154 155 156	 771 772	
• •	97 98		Tu		 Aug	VII •	127 128	745		3	 	VII •	157 158	773 774	Fr
x	99 100	717 718	Sa. We	14 8	 	x	129 130		Th Mo		Sep 	x	159 160	775 776	
	101 102	720		12	July 		131 132	749	We	20	Aug 		161 162	777 778	Ma
XIII	103 104 105	721 722 723		1 21 10	 June 	XIII	133 134 135		S Fr Tu		 July 	XIII	163 164 165	779 780 781	We
XVI	106 107	725		29 19	<b>Мау</b> 	XVI	136 137	753 754	Th		 June	XVI	166 167		Tu
XVII1 •	108 109 110	727			 April	XVIII •	138 139 140	756		Б	  May	XVIII •	168 169 170	785	ТЪ
	111			5		XXI	141	758	a	14	•	XXI	171	787	Pr-
XXI	112	1	S	26	 Mar 		142 143	759		4	  April	АЛІ	172 173		We
XXIV	114 115	73 <b>2</b> 733		8 21	 Feb	XXIV	144 145	762		1	•••	XXIV	174 175		Tu
<b>XXV</b> I •	116	735	Mo		 Jan	XXVI •	146 147 148	764	Sa	10	Mar  Fab	XXVI •	176 177	792 793 794	ТЪ
XXIX	118 119 120	737		20 8 29	  Dec	XXIX	148 149 150	766 766 767		27 16 6	Feb 	XXIX	178 179 180	795	Fr

# TABLE XVI.-(Continued.)

HIJRA CALENDAR.

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Initial Days of Hijra Years.

		VII-	-03	CL	E.		-	VIII	-01	7CI	Æ.		IX-CYCLE.			E.	
	Hijra.	<b>A</b> .D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tial	Days.
	181	797	s	5			211	826	Fr	13			241	855	We	22	May
п	182	798	Тһ	22	Feb	п	212	827	Tu	2		п	242	856	s	10	
	183	799	Tu	12			213	828	s	22	Mar		243	857	Fr	30	April
	184	800	Sa	1	•••		214	829	ТЪ	11			244	858	Tu	19	
v	185	801	We	20	Jan	v	215	830	Mo	28	Feb	v	245	859	Sa	8	
	186	802		10			216	1		18			246	860	Th	28	Mar
VII	187		Fr	30	Dec	VII	217		We	7	•••	VII	247	1.000	Mo	17	
*	188		We			•	218		Mo		Jan	•	248	862	1.1.1	7	
	189	804		8	•••		219	ł	<u> </u>	16	•••	_	249	1.1.1.1.1	We	24	Feb
X	190	805	Th	27	Nov	X	220	835	Tu	5		x	250	864	s	13	
																1	
	191	806	Tu	17			221		s	26	Dec		251	865	Fr	2	
	192	807	Sa	6			222		Th	14			252	866		22	
XIII	193	808	We	25	Oct	XIII	223		Mo	3		XIII	253	867	1200	11	
	194	809	Mo	15			224	838	Sa	23	Nov		254	868	Th	1	
	195	810	Fr	4			225	839	We	12			255		Mo	20	Dec
XVI	196	811	Tu	23	Sep	XVI	226	840	S	31	Oct	XVI	256	869	Fr	9	
	·197	812	s	12			227	841	Fr	21			257	870	We	29	Nov
XVIII	198	813	ТЪ	1		XVIII	228	842	Tu	10		XVIII	258	871	s	18	
•	199	814	Tu	22	Aug	•	229	843	S	80	Sep	•	259	872	Fr	7	
	200	815	Sa	11			<b>23</b> 0	844	Th	18			260	873	Tu	27	Oct
XXI	<b>20</b> 1	816	We	30	July	XXI	231	845	Мо	7		XXI	261	874	Sa	16	
	202	817	Mo	20			232	846	Sa	<b>2</b> 8	Aug		262	875	Th	6	
	203	818	Fr	9			233	847	We	17			263	876	Mo	24	Sep
XXIV	204	819	Tu	28	June	XXIV	234	848	s	5		XXIV	264	877	Fr	13	
	205	820	s	17			235	849	Fr	26	July		265	878	We	3	
XXVI	206	821	ТЬ	6		XXVI	236	850	Tu	15		XXVI	266	879	s	23	Aug
•	207	822	Tu	27	May	•	237	851	S	5		+	267	880	Fr	12	
	208	823	Sa	16			238	852	Th	23	June		268	881	Tu	1	
XXIX	209	824		-4		XXIX	239	853	Mo	12		XXIX	269	882	Sa	21	July
	210	825	Mo	24	April		<b>2</b> 40	854	Sa	2			270	883	Th	11	
											1						1

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# TABLE XVI.—(Continued.) HIJRA CALENDAR.

Initial Days of Hijra Years.

		<b>X</b> —	CY	CLI	G.		XI-CYCLE.				Б.		XII-			-CYCLE.				
	Hijra.	A.D. Initial Days.					Hijrn.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tia	l Days.			
11	271 272 273	884 885 886	1	29 18 8	June 	п	301 302 303	913 914 915	We	5.3	 July	п	331 332	943		4				
v	273 274 275 276	887 888 889	S Th	28 16 6	 May 	v	303 304 305 306	916 917 918	Fr Tu	17 5 24 14	 June	v	333 834 335 336	944 945 946 947	We S	24 13 2 23	Aug   July			
VII •	277 278 279	890 891 892	ТЪ	25 15 3	April  	VII *	307 308 309	919 920 921	Th Tu	3 23 12	 May	VII *	337 338 339	948 949 950	Tu S	11 11 1 20				
X	280 281	893 894			March March	x	310 311	922 923		1 21	 April	x	340 341	951 95 <b>2</b>		9 29	 May			
XIII	282 283 284	897	Th Tu	8	 Feb 	XIII	312 313 314	925 926	Tu S	9 29 19	 Mar 	XIII	342 843 344	954 955	Fr	7 27	  April			
XVI XVI	285 286 287 288	898 899 900	We	28 17 7 26	Jan   Dec	XVI XVIII	315 316 317 318	927 928 929 930	Mo Sa	8 25 14 3	 Feb 	XVI XVIII	345 346 347 348	956 957 958 959	Sa Th	15 4 25 14	l			
*	289 290	901 902	We S	16 5	 	1	319 320	931 932	Mo	24 13	Jan 	*	349 350	960		2	  Feb			
XXI	291 292 293		Th Tu Sa		Nov 	XXI	321 322 323	1.0.0	s	1 22 11	Jan Dec	XXI	351 352 353	962 963 964	Fr	9 30 19	Jan			
XXIV	294 295	907	We Mo	12	Oct 	XXIV	324 325	935 936	Mo Sa	30 19	Nov	XXIV	354 355	<b>96</b> ō		7	  Dec			
XXVI *	296 297 298	910	We S	9		XXVI *	326 327 328	938	Mo	8 29 18	 Oct	XXVI *	356 357 358	966 967 968		17 7 25	  Nov			
XXIX	299 300	911 912		29 18	1	XXIX	329 330	940 941		6 26	 Sep	XXIX	359 360	969 970	-	14 4	 			

# TABLE XVI.-(Continued.)

# HIJRA CALENDAR.

# Initial Days of Hijra Years.

	;	XIII-	07	YCI	le.		XIV—CYCLE.				JE.			XV-	-CY	CL	Е.
	Hijra.	A.D.	Ini	tia	Days.		Hijra.	A.D.	Ini	tial	Days.		Hijra.	A,D.	Ini	tial	Days.
п	361 362				Oct	п		1000 1001		1	 Nov	п		1 <b>03</b> 0 		9	 Dec
	363 364	973	Th	2			393	1002	Tu	10			423	1031	8	19	
v	365			21 10	Sep 	v		1003 1004			Oct 	v		1032 1033		7 26	 No <b>v</b>
VII	366 367			30 19	Aug			1005		8			426	1034	Sa	16	
•	368			19	•••	VII •		1006 1007			Sep 	VII •		1035 1036		5 25	 Oct
x	369 370			29 17	July 	x		1008 1009		5 25	 Aug	x		1037 1038		14 3	 
	371	981	Th	7			401	1010	Tn	15	Aug		491	1039	a	23	Ron
	372	982	Mo	-	June			1011		4				1059 1040		23 11	Sep 
XIII	373 374	983 984		15 4		XIII		1012 1013		- 1	•	XIII		1041			Aug
	37ō	<b>9</b> 85	8	24	 May			1013		13 2	 			1042 1043		21 10	
XVI	376 377	986 987		13 3		XVI		1015 1016		21 10	June 	XVI		1044 1045		29 19	July
XVIII	378	988	Sa	-	April	XVIII	1	1017			Мау	XVIII		1045		8	
•	379 380	989 <b>99</b> 0		11 31	 Mar	*		1018 1019		20 9		•		1047 1048		28 16	June 
									-								
XXI	<b>38</b> 1					XXI					April	XXI	441	1049	Mo	5	June
	382 383	992 993		8 26	 Feb			$\frac{1021}{1022}$		17 6				1050 1051		26 15	
XIX	<b>384</b>			15		XXIV		1023		-		XXIV		1051		3	 
XXVI	385 386			5 25	 Jan	XXVI		1024 1025		15 4	 	XXVI		1053 1054		23 12	
•	387	997	Th	14		•	417	1026	Tu	<b>2</b> 2		*		1054		2	 
IXIX	388 389	998 	Mo Fr	3 23	 Dec	XXIX		1027 1028		11 31	 Jan	XXIX		1056 1057		21 10	
	390	999	We	13				1029						1058	1		 Feb
												J					

## TABLE XVI.-(Continued.)

## HIJRA CALENDAR.

## Initial Days of Hijra Years.

		XVI	-01	CL	E.		X	. <b>VII</b> -	-03	CL	.E.		X	VIII	-c	YC	LE.
	Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tia	l Days.		Hijra.	A,D,	Ini	tial	Days
	451	1059	We	17			<b>4</b> 81	1088	Мо	27	Mar		511	1117	Sa	5	
II	452	1060	s	6		п	482	1089	Fr	16		II	1000		1000	24	April
.	453	1061	Fr	26	Jan		483	1090	We	6			513	1119	Mo	14	
	454	1062	Tu	15			484	1091	s	23	Feb		514	1120	Fr	2	
V	455	1063	Sa	4		v	485	1092	Th	12		v	515	1121	Tu	22	Man
	456		Th	25	Dec		486	1093	Tu	1			516	1122	s	12	
VII	457	1064	Mo	13		VII	487	1094	Sa	21	Jan	VII	517	1123	Th	1	
*	458	1065	Sa	3		+	488	1095	Тh	11		+	518	1124	Tu	19	Feb
	459	1066	We	22	Nov		489		Mo	31	Dec		519	1125	Sa	7	
x	460	1067	s	11		x	<b>49</b> 0	1096	Fr	19		x	520	1126	We	27	Jan
	461	1068	Fr	31	Oct		491	1097	We	9			521	1127	Mo	17	Jan
	462	1069	Tu	20			492	1098	s	28	Nov		522	1128	Fr	6	
XIII		1070		9		XIII		1099	Į	17		XIII	1100.01		12.2	25	Dec
	464	1071	Th	29	Sep		494	1100	Tu	6				1129			
	465	1072	Mo	17			495	1101	Sa	26	Oct		525	1130	Th	4	
XVI	466	1073	Fr	6		XVI	496	1102	We	15		XVI	526	1131	Mo	23	Nov
	467	1074	We	27	Aug		497	1103	Mo	5			527	1132	Sa	12	
IIIV.	468	1075	s	16		XVIII	<b>49</b> 8	1104	Fr	28	Sep	XVIII	528	1133	We	1	
•	469	1076	Th	4		•	499	1105	We	13		•	529	1134	Mo	22	Oct
	470	1077	Tu	25	July			1106		2	••		530	1135	Fr	11	
XXI	471	1078	Sa	14		IXX	501	1107	Th	22	Aug	XXI	531	1136	Tu	29	Sep
	1 C C C C C	1079	(	4				1108					532	1137	s	19	
	473	1080	Mo	22	June						July		533	1138	Th	8	
XIV	474	1081	Fr	11		XXIV	504	1110	We	20		XXIV	534	1139	Mo	28	Aug
	475	1082	We	1			505	1111	Mo	10			535	1140	Sa	17	
IVX	476	1083	S	21	May	XXVI	506	1112	Fr	28	June	XXVI	536	1141	We	6	
•	477	1084	Fr	10		•	507	1113	We	18		•	537	1142	Mo	27	July
	478	1085	Tu	29	April		508	1114	8	7			538	1143	Fr	16	
XIX	479	1086	Sa	18		XXIX	509	1115	ТЪ	27	May	XXIX	539	1144	Tu	4	
	480	1087	Th	8			510	1116	Tu	16			540	1145	S	24	June

## TABLE XVI.-(Continued.) HIJRA CALENDAR.

HIJKA OALLIDAK.

Initial Days of Hijra Years.

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	XD	(—O	YCL	E.			XX-	-CY	CL	E.			XXI-	-03	CL	E.
	Hijra.	). In	itial	Days.		Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tial	Days.
п	541 114 542 114	7 Mo	2		п	1000	1175 1176	1000	22 10	1000	п	602	1204 1205	Th	29 18	Aug 
v	543 114 544 114 545 115	9 We	11 30	May  April	v	574 575	1177 1178 1179	Mo Fr	30 19 8		v	604 605	1206 1207 1208	Sa. We	8 28 16	 July 
VII •	546 115 547 115 548 115 549 115	2 Tu 3 Sa	20 8 28 18	  Mar	V11 *	577 578	1180 1181 1182 1183	S Th	17 6		V11 •	607 608	1209 1210 1211 1212	Fr We	6 25 15 3	June
x	550 115	0	100		x	1000	1184		14	April 	x	1000	1213			1000
XIII	551 115 552 115 553 115	7 We	25 13 2	Feb	XIII	582	1185 1186 1187	Mo	4 24 13	 Mar 	XIII	612 613	1214 1215 1216	Sa. We	13 2 20	 April
XVI	554 115 555 116 556	0 Tu Sa	12 31	Jan  Dec	XVI	585 586	1188 1189 1190	S Th	2 19 8	 Feb 	XVI	615 616	1217 1218 1219	Fr Tu	10 30 19	 Mar 
XVIII *	557 116 558 116 559 110	2 Mo 3 Fr	10 29	  Nov	XVIII *	588 589	1191 1192 1193	Sa We	29 18 6	Jan	XVIII *	618 619	1220 1221 1222	Th Tu	8 25 15	 Feb
XXI	560 116		18	 Nov	XXI		1194		27	Dec	XXI		1223		4 24	Jan
XXIV	562 116 563 116 564 116	6 Fr 7 Tu	28	Oct	XXIV	592 593	1195 1196 1197	We S	6 24 13	 Nov	XXIV	622	1225 1226	Mo Fr	13 2 22	  Dec
XXVI	565 116 566 117 567 117	9 Th 0 Mo	-	and the second second	XXVI	595 596	1198 1199 1200	Tu Sa	3 23 11		XXVI *	626	1227 1228 1229	Th	12 30 20	 Nov
XXIX	568 117 569 117 570 117	38	23 12 2	Aug 	XXIX	599	1201 1202 1203	Fr	1 20 10		XXIX	629	1230 1231 1232	We	9 29 18	 Oct 
		1	-		1	-					1				1	

## TABLE XVI.-(Continued.)HIJRA CALENDAR.

## Initial Days of Hijra Years.

	3	XXII	-C	YCI	L <b>E</b> .		x	XIII	-C	YCI	LIE.		X	VIX	- <b>C</b>
	Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Init
	631	1233	Fr	7			661	1262	We	15			691		Мо
п	632	1234	Tu	26	Sep	п	662	1263	s	4		п	692	1292	Fr
	633	1235	s	16			663	1264	Fr	24	Oct		693	1293	We
	634	1236	Th	4			664	1265	Tu	13				1294	
v	635	1237	Mo	24	Aug	v	665	1266	Sa	2		v		1295	
	636	1238	Sa	14			666	1267	ТЪ	22	Sep			1296	
VII	637	1239	We	3		VII		1268				VII	697	1297	Sa.
•	638	1240	Mo	23	July	•	668	1269	Sa	31	Aug	*	698	1298	Th
	639	1241	Fr	12			669	1270	We	20				1299	
x	640	1242	Tu	1		x	<b>6</b> 70	1271	S	9		x	700	1300	Fr
	641	1243	s	21	June		671	1272	Fr	29	July		701	1301	We
	642	1244	Th	9			672	1273	Tu	18			702	1302	S
XIII	643	1245	Mo	29	May	XIII	673	1274	Sa	7		XIII	703	1303	Th
	644	1246	Sa	19			674	1275	ТЪ	27	June		704	1304	Tu
	645	1247	We	8			675	1276	Mo	15			705	1305	Sa
XVI	646	1248	s	26	April	XVI	676	1277	Fr	4		XVI	706	1306	We
	647	1249	Fr	16			677	1278	We	25	May		707	1307	Mo
XVIII	648	1250	Tu	5		XVIII	678	1279	S	14		XVIII	708	1308	Fr
•	649	1251	s	26	Mar	•	679	1280	Fr	3		+	709	1309	We
	650	1252	Th	14	÷		680	1281	Tu	<b>2</b> 2	April		710	1310	S
XXI	651	1253	Мо	3		XXI	681	1282	Sa	11	April	XXI	711	1311	ТЪ
	652	1254	Sa	21	Feb		682	1283	ТЪ	1				1312	
	653	1255	We	10			683	1284	Mo	2()	Mar		713	1313	Sa
XXIV	654	1256	s	30	Jan	XXIV	684	1285	Fr	9		XXIV		1314	
	655	1257	Fr	19			685	1286	We	27	Feb			1315	
XXVI	656	1258	Tu	8		XXVI	686	1287	S	16		XXVI	716	1316	Fr
*	657		s	29	Dec	•	687	1288	Fr	6		•	717	1317	We
	658	1259	Th	18			688	1289	Tu	25	Jan		718	1318	S
XXIX	659	1260	Mo	6		XXIX	689	1290	Sa	14		XXIX	719	1319	Th
	660	1261	Sa	26	Nov		690	1291	Th	4			720	1320	Tu

#### TABLE XVI.-(Continued.)

## HIJRA CALENDAR.

Initial Days of Hijra Years.

	2	XXV	C	YCI	le.		2	XVI	t-0	YC.	LE.		x	XVI	I—C	YC	LE.
	Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tial	Days.
п	722	1321 1322	We	20	<b>Ja</b> n 	п	752	1350 1351	Mo	28	1.56.51	п	782	1379 1380	8a	7	•••
v	724 725	1323  1324	Fr Tu	30	 Dec 	v	754 755	1352 1353 1354	We S	18 6 26	  Jan	v	784 785	1381 1382 1383	Mo Fr	28 17 6	Mar  
VII •	727 728	1325 1326 1327	Th Tu		 Nov 	V11 •	757 758	1355 1356 	Tu S	16 5 25	  Dec	VII •	787 788	1384 1385 1386	S Fr	12 2	Feb  
X		1328 1329		5 25	 Oct	x	1023	1357 1358	1.1.1	14 3		x		1387 1 <b>38</b> 8		22 11	Jan 
XIII	732	1 <b>33</b> 0 1331 1332	Fr	4	  Sep	XIII	762	1359 1360 1361	We		Nov  Oct	XIII	792	 1 <b>38</b> 9 1390			Dec 
XVI	734 735	1333 1334 1385	S Th	12 1	-  	XVI	764 765	1362 1363 1364	Fr Tu	21 10 28	  Sep	XVI	794 795	1391 1392 1393	We S	- 1	Nov 
tvin	737 738	1336 1337 1338	Sa. We	10 30	Aug  July	XVIII	767 768	1365 1366 1367	Th Mo	12.1	  Aug	XVIII	797 798	1394 1395 1395 1396	Tu Sa	27 16 5	Oct 
		1339	1	20 9	 		10.54	1368	1.00	100				1397		- 1	 Sep
XXI	742	1340 1341 1342	s	17	June 	XXI	772	1369 1370 1371	Fr	5 26 15	 July	XXI	802	1398 1399 1400	We	13 3 22	Sep  Aug
VIX XVI	744 745	1343 1344 1345	Mo Sa	24 15	Мау 	XXIV XXVI	775	1372 1373 1374	Th	- 1	 June	XXIV XXVI	804 805	1401 1402 1403	Th Tu	11 1 21	  July
XXIX	747 748	1346 1347	Mo Fr	24 13		* XXIX	777 778	1375 1376 1377	Sa We	2	 May	*	807 808	1404 1405	Th Mo	10 29	 June
	123	1348 1349		1 22	 Mar	AIA	12.5.5	1378	120	1.1	 April	лаід		1406 1407		18 8	••• •••

## TABLE XVI.--(Continued.) HIJRA CALENDAR.

Initial Days of Hijra Years.

	x	XVII	<b>I</b> —	CY	CLE.		X	XIX	: <b></b> C	YC	LE.			XXX	- <b>C</b>	Y
	Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	iti
	811	1408	s	27	May		841	1437	Fr	5	July		871	1466	We	
11	812	1409	Th	16		II	842	1438	Tu	24	June	II	872	1467	s	
	813	1410	Tu	6			843	1439	s	14			873	1468	Fr	2
	814	1411	Sa	25	April		844	1440	Th	2			874	1469	Tu	
v	815	1412	We	13	1.1	v	845	1441	Mo	22	May	V	875	1470	Sa	į
	816	1413	Mo	3			846	1442	Sa	12			876	1471	ТЪ	
VII	817	1414	Fr	23	Mar	VII	847	1443	We	1		VII	877	1472	Mo	
٠	818	1415	We	13		+	848	1444	Mo	20	April	*	878	1473	Sa	
	819	1416	s	1			849	1445	Fr	9			879	1474	We	ł
x	820	1417	Th	18	Feb	x	850	1446	Tu	29	Mar	x	880	1475	8	
	821	1418	Tu	8			851	1447	8	19			881	1476	Fr	
	822	1419	Sa	28	1.11		852	1448	ТЪ	7			882	1477	Tu	
XIII	823	1420	We	17		XIII	853	1449	Mo	24	Feb	XIII	883	1478	Sa	
	824	1421	Mo	6			854	1450	Sa	14			884	1479	ТЪ	
	825		Fr	26	Dec		855	1451	We	3			885	1480	Mo	,
XVI	826	1422	Tu	15		XVI	856	1452	s	23	Jan	XVI	886	1481	Fr	
	827	1423	s	5			857	1453	Fr	12			887	1482	We	1
KVIII	828	1424	Th	23	Nov	XVIII	858	1454	Tu	1		XVIII	888	1483	S	
*	829	1425	Tu	13		*	859		s	22	Dec	*	889	1484	Fr	
	830	1426	Sa	2			860	1455	Тһ	11			890	1485	Tu	
XXI	831	1427	We	22	Oct	XXI	861	1456	Мо	29	Nov	XXI		1486	1	
	832	1428	Mo	11			862	1457	Sa	19					1	
	833	1429	Fr	30	Sep		863	1458	We	8				1487		
xxiv	834	1430	Tu	19		XXIV	864	1459	s	28	Oct	XXIV		1488		
	835	1431	s	9				1460		17				1489		1
XVI	836	1432	Th	28	Aug	XXVI	866	1461	Tu	6	•••	xxvi		1490		
•	837	1433	Tu	18		*	867	1462	S	<b>2</b> 6	Sep	*		1491		
	838	1434	Sa	7			868	1463	ТЪ	15				1492	1	
xix	839	1435	We	27	July	XXIX	869	1464	Мо	3		XXIX	899	1493	Sa	
	840	1436	Mo	16			870	1465	Sa	24	Aug		900	1494	Th	

## TABLE XVI.-(Continued.) HIJRA CALENDAR.

Initial Days of Hijra Years.

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	XXXI-CYCLE.		XXXII—CYCLE.		XXXIII—CYCLE.
1000	A.D. Initial Days.		H.D. Initial Days.		H A.D. Initial Days.
п	901 1495 Mo 21 Sep 902 1496 Fr 9 903 1497 We 30 Aug	п	931 1524 Sa 29 Oct 932 1525 We 18 933 1526 Mo 8	п	961 1553 Th 7 Dec 962 1554 Mo 26 Nov 963 1555 Sa 16
v	904 1498 S 19 905 1499 Th 8 906 1500 Tu 28 July	v	934 1527 Fr 27 Sep 935 1528 Tu 15 936 1529 S 5	v	964 1556 Ne 4 965 1557 S 24 Oct 966 1558 Fr 14
VII .	907         1501         S         17            908         1502         Th         7            909         1503         Mo         26         June	VII *	937         1530         Th         25         Ang           938         1531         Tu         15            939         1532         Sa         3	VII *	967 1559 Ta 3 968 1560 S 22 Sep 969 1561 Th 11
x	910 1504 Fr 14	X	940 1533 We 23 July	x	5101002 10 51
XIII	911 1505 We 4 912 1506 S 24 May 913 1507 Th 13	XIII	941 1534 Mo 13 942 1535 Fr 2 943 1536 Tu 20 June	XIII	971 1563 Sa 21 972 1564 We 9 973 1565 S 29 July
XVI	914 1508 Tu 2 915 1509 Sa 21 April 916 1510 We 10	XVI	944         1537         S         10            945         1538         Th         30         May           946         1539         Mo         19	XVI	974 1566 Fr 19 975 1567 Tu 8 976 1568 Sa 26 June
VIII •	917 1511 Mo 31 Mar 918 1512 Fr 19 919 1513 We 9	XVIII	947 1540 Sa 8 948 1541 We 27 April 949 1542 Mo 17	xviii *	977 1569 Th 16 978 1570 Mo 5 979 1571 Sa 26 May
	920 1514 S 26 Feb		950 1543 Fr 6		980 1572 We 14
IXI	921 1515 Th 15 Feb 922 1516 Tu 5 923 1517 Sa 24 Jan	XXI	951 1544 Tu 25 Mar 952 1545 S 15 953 1546 Th 4	IXX	981 1573 Sa 3 982 1574 Fr 23 April 983 1575 Tu 12
XIV	923 1517 Sa 24 Jan 924 1518 We 13 925 1519 Mo 3	XXIV	953 1546 1h 4 954 1547 Mo 21 Feb 955 1548 Sa 11	XXIV	984 1576 Sa 31 Mar 985 1577 Th 21
CXVI	926 Fr 23 Dec 927 1520 We 12	XXVI	957 1550 Mo 20	XXVI	986 1578 Mo 10 987 1579 Sa 28 Feb 988 1580 We 17
XIX	928         1521         S         1            929         1522         Th         20         Nov           930         1523         Tu         10	XXIX	958         1551         Fr         9            959          Tu         29         Dec           960         1552         S         18	XXIX	
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## TABLE XVI.-(Continued.)

## HIJRA CALENDAR.

Initial Days of Hijra Years.

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	x	XXIV	7—0	CYC	)LE.		- 3	XX	70	YC	LE.	- -	x	XXV	I-4
	Hijra.	A.D.	Ini	tia	Days.		Hijra.	A.D.	Ini	tial	<b>Days</b> .		Hijra.	AD.	Ini
11	992	1583 1584 	Sa	4	  Dec	11	1022	1612 1613 1614	Th		Feb 	11	1052	1641 1642 1643	Tu
V	995 996	1585 1586 1587	Fr We	2	  Nov	v		1616 	We Mo		Jan  Dec	•		1645 1 <b>54</b> 6	Mo Sa
¥11	998	1588 1589 1590	Fr		 Oct		1027 1028 1029		We	19 9 28	  Nov	VII •	1058		Mo
X	1000	1591	8a	9		X	1030	1620	Th	16		X	1060		Tu
X1II	1002	1593	Mo	1	Sep 	XIII	1032	1621 1622	Sa	-	 Oct	XIII	1062	1650 1651 1652	ТЪ
	1004 1005	1595 1596	We S	27 15	 Aug 		103 <b>4</b> 1035	1624 1625	Mo Fr	4 23	  Sep		1064 1065	1653 1654	Sa. We
XVI XVIII	1007	1598	Tu	5 25 14	 July 	XVI XVIII	1037	1627	s	2	  Aug	XVI XVIII	1067	1656	Fr
•	1009 1010	1600 1601		8 22	 June		1039 1040			11 31	 July	*	1069 1070		
XXI	1012	1603	We	1		XXI	1042	1632	Mo	9		XXI	1072	1661	Sa.
XXIV			ТЪ	20 9 29	May  April		1044 1045	1635	Tu S	17 7	June 	XXIV	1074	1662 1663 1664	s
17XX •	1016 1017 1018	1608	Tn	7	  Mar	XXVI *	1047		Tu		Мау 	XXVI •	1077		8
XXIX		1610 1611		16 6	•••	XXIX	1049		We			XXIX	1079		Mo
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#### TABLE XVI.—(Continued.)

## HIJRA CALENDAR.

## Initial Days of Hijra Years.

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	X	XVI	<b>I</b> -I	CY	CLE.		XX	xvi	11–	-CY	CLE.		x	XXI	x_(	OYC	CLE.	
	Hijra.	A.D.	Ini	itial	Days.		Hijra.	A.D	Ini	tial	Days.		Hijra.	A.D.	Ini	tial	Days.	
	1081	1670	We	11	May		1111	1699	Mo	19		1	1141	1728	Sa	27	July	
II	1082	1671	s	30	April	II	1112	1700	Fr	7		II	1142	1729	We	16		L
	1083	1672	Fr	19			1113	1701	We	28	May	1.12	1143	1730	Mo	6		L
	1084	1673	Tu	8			1114	1702	s	17			1144	1731	Fr	25	June	L
V	1085	1674	Sa	28	Mar	v	1115	1703	Th	6		v	1145	1732	Tu	13		L
	1086	1675	Th	18			1116	1704	Tu	25	April	1.1.7	1146	1733	s	3		L
۷II	1087	1676	Mo	6		VII	1117	1705	Sa	14		VII	1147	1734	Th	23	May	Ł
٠	1088	1677	Sa	24	Feb	•	1118	1706	Th	4			1148	1735	Tu	13		L
	1089	1678	We	13			1119	1707	Mo	24	Mar	1.1	1149	1736	Sa	1		L
X	1090	1679	S	2		x	1120	1708	Fr	12		x	1150	1737	We	20	April	
	1091	1680	Fr	23	Jan		1121	1709	We	2	Mar		1151	1738	Mo	10		
	1092	1681	Tu	11		1.1.1	1122	1710	s	19	Feb	1.1.1	1152	1739	Fr	30	Mar	L
XIII	1093		Sa	31	Dec	XIII	1123	1711	Th	8		XIII	1153	1740	Tu	18		L
	1094	1682	Th	21			1124	1712	Tu	29	Jan	11	1154	1741	s	8		L
	1095	1683	Mo	10			1125	1713	Sa	17		1.00	1155	1742	Th	25	Feb	L
XVI	1096	1684	Fr	28	Nov	XVI	1126	1714	We	6		XVI	1156	1743	Mo	14		L
	1097	1685	We	18		1.11	1127		Mo	27	Dec	125.0	1157	1744	Sa	4		L
<b>VIII</b>	1098	1686	s	7		XVIII	1128	1715	Fr	16		XVIII	1158	1745	We	23	Jan	L
٠	1099	1687	Fr	28	Oct		1129	1716	We	5			1159	1746	Mo	13		L
	1100	1688	Tu	16			1130	1717	s	24	Nov		1160	1747	Fr	2		
XXI	1101	1689	Sa	5		XXI	1131	1718	Th	13		XXI	1161		Tu	22	Dec	
	1102	1690	Th	25	Sep	1.1.1	1132	1719	Tu	3			1162	1748	S	11		
		1691		14			1133	1720	Sa	22	Oct	1	1163	1749	Th	30	Nov	
XIV	1104	1692	Fr	2		XXIV	1134	1721	We	11		XXIV	1164	1750	Mo	19		Í
	1105	1693	w	23	Aug		1135	1722	Mo	1			1165	1751	Sa	9	Nov	0
XVI	1106	1694	S	12		XXVI	1136	1793	Fr	20	Sep	XXVI	1166	1752	We	8	Nov	
•	1107		1.00	2			1137		1	9			1.00	1753	1000	29	Oct	
	1.1	1696	2.0		July		1138	6255	100	29	Aug		22.53	1754	1.1.1	18		
XIX	1109			10	outy	XXIX	1139		1.00	18		XXIX	22.25	1755	100	7		
		10000		1.1.1	June		1140		1.1	8			10.00	1756	1.0	26	Sep	

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# **TABLE XVI.**—(Continued.)HIJRA CALENDAR.

Initial Days of Hijra Years.

		XL-	-CY	ĊĿ	E.		3	XLI-	-03	CL	E.		2	cLII	-03	CI	E.
	Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tial	Days.
	1171	1757	ть	15			1201	1786	Tu	24	Oct		1231	1815	s	3	
п	1172	1758	Mo	4		п	1202	1787	Sa	13		II	1232	1816	Th	21	Nov
	1173	1759	Sa	25	Aug			1788	1	2			1233	1817	Tu	:1	***
	1174	1760	We	13			1204	1789	Mo	21	Sep		1234	1818	Sa	31	Oct
v	1175	1761	s	2		v	1205	1790	Fr	10		v	1235	1819	We	20	
	1176	1762	Fr	23	July		1206	1791	We	31	Aug		1236	1820	Mo	9	
VII	1177	1763	Tu	12		VII	1207	1792	S	19		VII	1237	1821	Fr	28	Sep
*	1178	1764	s	3		*	1208	1793	Fr	9	5.00	+	1238	1822	We	18	
	1179	1765	Th	20	June		1209	1794	Tu	29	July		1239	1823	s	7	
X	11 <b>8</b> 0	17 <b>6</b> 6	Мо	9	•••	x	1210	1795	Sa	18		X	1240	1824	Th	26	Aug
	1181	1767	Sa	30	May		1211	1796	Th	7			1241	1825	Tu	16	
	1182	1768	We	18			1212	1797	Mo	26	June		1242	1826	Sa	5	
XIII				7		XIII	1213	1798	Fr	15		XIII	1243	1827	We	25	July
	1184	1770	Fr	27	April		1214	1799	We	ō			1244	1828	Mo	14	
	1185	1771	Tu	16			1215	1800	s	25	May		1245	1829	Fr	3	
17X	1186	1772	Sa	4		XVI	1216	1801	Th	14		XVI	1246	1830	Tu	22	June
	1187	1773	Th	25	Mar		1217	1802	Tu	4			1247	1831	S	12	
XVIII	1188	1774	Mo	14		XVIII	1218	1803	Sa	23	April	XVIII	1248	1832	Th	31	May
*	1189	1775	Sa	4		*	1219	1804	Th	12		+	1249	1833	Tu	21	-
	1190	1776	We	21	Feb		1220	1805	Mo	1			1250	1834	Sa	10	
XXI	1191	1777	s	9		XXI	1221	1806	Fr	21	Mar	XXI	1251	1835	We	29	Apr
	1192	1778	Fr	30	Jan		1222	1807	We	11			1252	1836	Mo	18	
	1193	1779	Tu	19			1223	1808	s	28	Feb		1253	1837	Fr	7	
XXIV	1194	1780	Sa	8		XXIV	1224	1809	Th	16		VIXX	1254	1838	Tu	27	M
	1195		ТЪ	28	Dec		1225	1810	Tu	6			1255	1839	S	17	
XXVI	1196	1781	Mo	17		XXVI	1226	1811	Sa	26	Jan	XXVI	1256	1840	Th	5	
•	1197	1782	Sa	7		•	1227	1812	Th	16		+	1257	1841	Tu	23	Fell
		1783		26	Nov		1228	1813	Mo	4			1258	1842	Sa	12	
XXIX	1 <b>1 9</b> 9	1784	ន	14		XXIX	1229		Fr	24	Dec	XXIX	1.000	12.00	1.01	1	
	1200	1785	Fr	4			1230	1814	We	14			1260	1844	Mo	22	Jan

## TABLE XVI-(Continued.)

## HIJRA CALENDAR.

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Initial Days of Hijra Years.

	x	LII	t-0	YC	LE.		3	LIV	-c	YCI	LE.			XLV	—C	YCI	L <b>E</b> .
	Hijra.	A.D.	Ini	itial	Days.		Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	In	itia	l Days
	1261	1845	Fr	10			1291	1874	We	18	Feb		1321	1903	Мо	30	Mar
11	1262		Tu	30	Dec	11	1292	1875	s	7		11	1322	1904	Fr	18	•••
	1263	1846	s	20			1293	1876	Fr	28	Jan		1323	1905	We	8	
	1264	1847	Th	9			1294	1877	Tu	16			1324	1906	s	25	Feb
V	1265	1848	Mo	27	Nov	v	1295	1878	S	5		v	1325	1907	ТЪ	14	•••
	1266	1849	Sa	17			1296		Th	26	Dec		1326	1908	Tu	4	
٧II	1267	4850	We	6		VII	1297	1879	Mo	15		V1I	1327	1909	Sa	23	Jan
*	1268	1851	Mo	27	Oct	+	1298	1880	Sa	4		*	1328	1910	Th	13	
	1269	1851	Fr	15			1299	1881	We	23	Nov		1329	1911	Mo	2	•••
X	1270	1853	Tu	4		x	1300	1882	S	12		x	1330		Fr	22	Dec
	1271	1854	s	24	Sep		1301	1883	Fr	2			1331	1912	We	11	
	1272	1855	Th	13			1302	1884	Tu	21	Oct		1332	1913	s	30	Nov
UI	1273	1856	Mo	1		XIII	1303	1885	Sa	10		XIII	1833	1914	Тħ	19	•••
	1274	1857	Sa	22	Aug		1304	1886	Th	30	Sep		1334	1915	Tu	9	••••
	1275	1858	We	11			1305	1887	Mo	19			1335	1916	Sa	28	Oct
.VI	1276	1859	s	31	July	XVI	1306	1888	Fr	7		XVI	1336	1917	We	17	•••
	1277	1860	Fr	30			1307	1889	We	28	Aug		1387	1918	Mo	7	
ш	1278	1861	Tu	9		XVIII	1308	1890	S	17		XVIII	1338	1919	Fr	26	Sep
	1279	1000	1	29	June	+	1309	1891	Fr	7		+	1339	1920	We	15	
	1280	1863	Th	18			1310	1892	Tu	26	July		1 <b>34</b> 0	1921	ន	4	•••
x	1287	1864	Mo	6	June	XXI	1311	1893	Sa	15		XXI	1341	1922	ТЪ	24	Aug
	1282	1865	Sa	27	May		1312	1894	Th	5			1342	1923	Tu	14	
	1	1866					1313	1895	Mo	24	June		1843	1924	Sa	2	
JV	1281	C		5		XXIV	1314	1896	Fr	12		XXIV	1344	1925	We	22	July
	1.2	1868		24	April		1315	1897	We	2				1926			
IV.	1286	1869	[u	13		XXVI	1316	1898	S	22	May	XXVI	1346	1927	Fr	1	
	1287	Contraction of	1.00	3		+	1317	1899	Fr	12		•	1347	1928	We	20	June
	1288	1871	Th	23	Mar		1318	1900	Tu	1			1348	1929	s	9	
IX	1289	1872	Mo	11		XXIX	1319	1901	Sa	20	April	XXIX	1349	1930	ТЪ	29	May
	1290			1				1902		10			1350	1931	Tu	19	

## TABLE XVI.--(Concluded.) HIJRA CALENDAR.

Initial Days of Hijra Years.

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	z	LVI	.—C	YC	LE.		x	LVI	I-0	YC	LE.		x	LVII	— 1—(
	Hijra.	A.D.	Ini	tial	Days.		Hijra.	A.D.	Ini	tial	Days,		Hijra.	<b>A.D</b> .	Ini
II	1352	1932 1933 1934	We		 April 		1382	1962	Mo	4	  May		1412 1413	1992	8a Th
	1855	1937	Tu S	14	 Mar 	v	1384 1385 1386 1387	1965 1966	S Fr	2 22	  April 	v	1414 1415 1416 1417	1994 1995	Fr We
	1358 1359 1 <b>36</b> 0	1940	8a	10			1388 1389 1390	1969	Th	20	Mar  		1418 1419 1420	1998	Tu
XIII	1362 1363	1943 	Fr Tu	8 28		XIII	1892 1393	1972 1973	We S	16 4		XIII	1422		Mo Fr
XVI	1365 1366 1 <b>36</b> 7	1946 1947	Th Mo Sa	15		XVI XVIII	1396 1397	1975 1976 	Tu Sa Th	14 3 23	  Dec	XVI	1425 1426 1427	2004 2005 2006	S Th Tu
XVIII •	1369	1	Mo	24	 Oct 	+	1398 1399 1400	1978	Sa	2	  Nov		1429		Th
xxi	1372 1373	19 <b>5</b> 2 1953	З Th	21 10	 Sep 		1402 1403	1981 1982	Fr Tu	30	Oct	XXI XXIV	1432 1433	2010 2011	We S
XXVI	1375 1376 1377	19 <b>5</b> 5 1956 1957	Sa We Mo	20 8 29	Aug   July	XXVI	1405 1406 1407	1984 1985 1986	Th Mo Sa	27 16 6	Sep	XXVI *	1435 1436 1437	2013 2014 2015	Tu S <b>a</b> Th
XIX	1379	1958 1959 1960	Tu	18 7 26	  June	XXIX		1.0.20	s	14	Aug 	XXIX	1438 1439 1440	2017	Fr
		<u> </u>	L	_			-		-			6			

#### TABLE XVII. \_\_\_\_\_

General Table of	Corresponding Dates.	

	SOLAT	R-YEAR.		LUNI-S	OLAR	YEAR.	JUP	ITER-CY	CLES.	bi.	
	Kali	Initial	Vik	Intercal.	Sak	Initial Day	60 Y	ears.	12	Sapt. Rishi.	Era.
	Yuga.	Day.	Sam	Month.	Sal.	Initial Day.	S. Sid.	Tel.	Years.	Sap	Sel.
0	3042	13 Mar.					52.44	51. 55	Phâl	17	253
9	43	14					45	56	Chait	18	254
8	44	14	0				46	57	Vais	19	255
7	45	13 -	1				47	58	Jyesh	20	250
6	46	13 -	2				48	59	Ashad	21	257
5	47	14 -	3				49	60	Srâv	22	258
4	48	14 -	4				50	52. 1	Bhåd	23	259
3	49	13 -	5				51	2	Aswa	24	260
2	50	13 -	6				52	3	Kårt	25	261
51	3051	14 —	7				53	4	Agra	26	262
10	3052	14 Mar.	8				54	5	Paush	27	263
9	53	13 -	9				55	6	Mâgh	28	264
8	54	14 -	10				56	7	Phâl	29	265
7	55	14 -	11				57	8	Chait	30	266
6	56	14 -	12				58	9	Vais	31	267
5	57	13 -	13				59	10	Jyesh	32	268
4	58	14 -	14	<u> </u>			60	11	Ashad	33	269
3	59	14 -	15				53. 1	12	Srâv	34	270
2	60	14 -	16				2	13	Bhâd	35	271
1	3061	13 —	17				3	14	Aswa	36	272
0	3062	14 Mar.	18				4	15	Kårt	37	273
9	63	14 -	19				5	16	Agra	38	274
8	64	14 -	20				6	17	Paush	39	275
7	65	18 -	21				7	18	Mågh	40	276
6	66	14 -	22				8	19	Phâl	41	277
5	67	14 -	23				9	20	Chait	42	278
4	68	14 -	24				10	21	Vais	43	279
3	69	13 -	25				11	22	Jyesh	44	280
2	70	14	26	1			12	23	Ashad	45	281
1	3071	14 -	27				14	52.24	Bhâd	46	282

#### GENERAL TABLE OF CORRESPONDING DATES.

#### TABLE XVII-(Continued.)

	SOLAT	-YEAR.		LUNI-S	OLAR	YEAR.	JUP	ITER-C	CLES.	bi.		11
	Kali	Initial	Vik	Intercal	Sak	Initial Day.		Cears.	12	Sapt. Rishi.	Sel. Era.	Gunta Kal.
B. C.	Yuga.	Day.	Sam	Month.	Sal.	Initial Day.	S. Sid.	Tel.	Years.	Sap	Sel.	Gui
80	3072	14 Mar	28				53.15	52.25	Aswa	47	283	
•29	73	13 -	29				16	26	Kårt	48	284	Γ.
28	74	14	30				17	27	Agra	49	285	
27	75	14	31				18	28	Paush	50	286	
26	76	14 -	32				19	29	Mågh	51	287	
*25	77	13 -	33				20	30	Phâl	52	288	
24	78	14	34				21	31	Chait	53	289	
23	79	14 -	35				22	32	Vais	54	290	
22	80	14	36				23	33	Jyesh	55	291	
*21	3081	13 —	37				24	34	Ashad	56	292	
20	3082	14 Mar	38				25	35	Srâv	57	293	
19	83	14	39				26	36	Bhâd	58	294	
18	84	14 -	40				27	87	Aswa	59	295	
*17	85	13 -	41				28	38	Kârt	60	296	
16	86	14	42				29	39	Agra	61	297	
15	87	14 -	43				30	40	Paush	62	298	
14	88	14 -	44				31	41	Mâgh	63	299	
•13	89	13 -	45				32	42	Phâl	64	300	
12	90	14 -	46				33	43	Chait	65	301	
11	3091	14 -	47				34	44	Vais	66	302	
10	3092	14 Mar	48				35	45	Jyesh	67	303	
•9	93	13 -	49				36	46	Ashad	68	304	
8	94	14	50				37	47	Sráv	69	305	
7	95	14 -	51				38	48	Bhåd	70	306	
-	96	14	52				39	49	Aswa	71	307	
		-	53				40	50	Kårt	72	308	
			54				41	51	Agra	73	309	
			11				42	52	Paush	74	310	
							43	53	Mågh	75	311	
					·		44	54	Phâl	76	312	

## General Table of Corresponding Dates.

	SOLA	R-Y	EAR,		LUNI-S	OLAR	YEAR.	JUP	ITER-C	YCLES.			
. D.	Kali	In	itial	Vik	Intercal.	Sak		60 Y	ears.	12	Rishi.	ca.	Kâl.
	Yuga.		ay.	Sam	Month.	Sal.	Initial Day.	S. Sid.	Tel.	Years.	Sapt. Rishi.	Sel. Era.	Gupt. Kål.
1	3102	14	Mar	58				53. 45	52.55	Chait	77	313	
2	03	14	-	59	Sråv			46	56	Vais	78	314	Ε.
3	04	14	-	60				47	57	Jyesh	79	315	
•4	05	13	-	61				48	68	Ashad	80	816	
5	06	14	-	62	Ashad			49	59	Sráv	81	317	
6	07	14	-	63			1 1	50	60	Bhâd	82	318	
7	08	14	-	64				51	53.1	Aswa	83	819	
*8	09	14	-	65	Vais			52	2	Kårt	84	320	
9	10	14	-	66				53	3	Agra	85	321	
10	3111	14	-	67	Sråv	ľ		54	4	Paush	86	822	
11	3112	14	Mar	68				55	5	Mågh	87	323	
*12	13	14	-	69				56	6	Phâl	88	324	
13	14	14	-	70	Ashad			57	7	Chait	89	325	
14	15	14	-	71				58	8	Vais	90	326	
15	16	14	-	72	Jyesh			59	9	Jyesh	91	327	
•16	17	14	-	73				60	10	Ashad	92	328	
17	18	14	-	74				54. 1	11	Srâv	93	329	
18	†19	14	-	75	Kar Phal	1		2	12	Bhåd	94	330	
19	20	14	-	76				3	13	Aswa	95	331	
*20	3121	14	-	77				4	14	Kârt	96	332	
21	3122	14	Mar	78	Srâv			5	15	Agra	97	333	
. 22	23	14	-	79				6	16	Paush	98	334	
23	24	14	-	80				7	17	Mâgh	99	335	
*24	25	14	-	81	Ashad			8	18	Ph\$1	100	336	
25	26	14	-	82				9	19	Chait	1	337	
26	27	14	-	83				10	20	Vais	2	338	
27	28	14	-	84	Vais			11	21	Jyesh	3	339	
*28	29	14	-	85				12	22	Ashad	4	340	
29	30	14	-	86	Sråv			13	23	Srâv	5	34)	
30	3131	14	-	87				14	24	Bhâd	6	342	

† Agrahayana omitted.

General	Table	of	Corresponding	Dates.
General	1 aore	IJ	Corresponding	Dales.

	SOLAR	-YE	AR.		LUNI-S	OLAB	-YEAR.	JUP	ITER-CY	CLES.			
A. D.	Kali		itial	Vik	Intercal.	Sak	Initial Day.	60 Y	cars.	12	Sapt. Rishi.	ra.	1
	Yuga.	Da	ay.	Sam	Month.	Sal.	Initial Day.	S. Sid.	Tel.	Years.	Sapt.	Sel, Fra.	1141 T 1
31	3132		Mar	88				54 15	53. 25	Aswa	7	343	
*32	3152	14	mar	89	Ashad			16	26	Kart	8	344	1.
33	34	15	Ξ	90				17	27	Agra	9	345	1
34	35	15	_	91				18	28	Paush	10	346	1
35	36	15		92	Jyesh			19	29	Mågh	11	347	1
*36	37	14	1	93	Jyesu			20	30	Phâl	12	348	1
37	+38	15	-	94	(Aswn	3		20	31	Chait	13	349	Ł
38	39	15	157	95	) Phâl	5		22	32	Vais	14	350	£.
39	40	15		96				23	33	Jyesh	15	351	1
*40	3141	14	-	97	Srâv			24	34	Ashad	16	352	1
41	3142	14	Mar	98				25	85	Srâv	17	353	
42	43	14		99				26	36	Bhâd	18	354	1
43	44	15	1	100	Ashad			27	37	Aswa	19	355	
*44	45	14	_	101				28	38	Kårt	20	356	1
45	46	15	_	102				29	39	Agra	21	357	1
46	47	15	_	103	Vais			30	40	Paush	22	358	
47	48	15	13	104				31	41	Mâgh	23	859	1
*48	49	14		105	Srâv			32	42	Phâl	24	360	Ł
49	50	15	_	106				33	43	Chait	25	361	Т
50	3151	15	-	107				34	44	Vais	26	362	
51	3152	15	Mar	108	Ashad			35	45	Jyesh	27	363	*
*52	53	14	-	109				36	46	Ashad	28	364	ł.
53	54	15	1	110				37	47	Srâv	29	365	
54	55	15	1	111				38	48	Bhåd	30	366	
55	56	15	-	112				40	49	Kårt	31	367	ł
*56	157	14	-	113	S Bhad	1		41	50	Agra	32	368	ļ
57	58	15	4	114	? Phâl	1		42	51	Paush	33	369	
58	59	15	1	115				43	52	Mâgh	34	370	0
59	60	15	-	116	Srâv			44	53	Phâl	35	371	ı
*60	3161	14	_	117				45	54	Chait	36	375	Т

† Agrahyana omitted.

‡ Pausha omitted.

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	SOLAR	-Ye	AR.		LUNI-S	OLAR	Ye/	R.		J	UPI	TER C	ICLES.			-
<b>▲</b> . D.	Kali Yuga.		tial ay.	Vik Sam	Intercal Month.	Sak Sal.	Init	ial	Day.	_		ears.	12 Yenrs.	Sapt. Rishi.	Era.	Gupt. Kâl.
										<b>B</b> .	Sid.	Tel.		8a]	Sel	Gu
61	3162	15	Mar	118	•••						46	<b>53</b> . 55	Vais	37	373	
62	63	15	_	119	Ashad						46	56	Jyesh	38	374	
63	64	15	_	120							47	57	Ashad	39	375	
*64	65	14	_	121							48	58	<b>Srâv</b>	40	376	
65	66	15	_	122	Chait						49	59	Bhâd	41	377	
66	67	15		128	•••						50	60	Aswa	42	378	
67	68	15		124	Srâv						51	54. 1	Kârt	43	379	
*68	69	14	_	125							52	2	Agra	44	380	
69	70	15	—	126	•••						53	8	Paush	45	381	
70	3171	15		127	Ashad						54	4	Mâgh	46	382	
													Phâl	47	383	
71	8172		Mar		•••						55	5	Chait	48	384	
•72	73	14		129		}					56	6	Vais	10 49	385	
73	74	15	-	130	Vais						57	7	Jyesh	50	386	
74	75	15		131							58	8	Ashad	51	387	
75	76	15	-	132	Bhåd					Ι.	59	9 10	Srâv	52	388	
*76	77	14		133	•••					1	1 2	10	Bhâd	53	389	
77	78	15	-	134	•••		Sa	14	Mar		2 8	11	Aswa	54	390	
78	79	15	_	135		0			mar Feb		5 3	12	Kårt	55	391	
79	80	15		136	Srâv	1	Th		Mar		4	14	Agra	56	392	
*80	3181	14	_	137	•••	2										
81	3182		Mar		•••	3			Feb	ł	5	15		57 E 9	<b>3</b> 93 394	
82	83	15	-	139	Jyesh	4			Feb	1	6	16	Mâgh Dhái	58 59	394 395	
83	84	15	-	140	•••	5	Th	-	Mar		7	17	Phâl	60 60	395 396	
*84	85	14	-	141	•••	6			Feb		8	18	Chait			
85	86	14	-	142	Chait	7			Feb		9	19	Vais Troub	61 62	397 398	
86	87	15	—	143		8	Fr	-	Mar		10		Jyesh Ashad	62 63	398	
87	88	15	-	144	Srâv	9			Feb	1	11	21	Asnaa Srâv	64	399 400	
*88	89	14	-	145	•••	10			Mar	1	12 13	22 23	Bhâd	65	400 401	
89	90	15	_	246		11	1		Feb	.		54. 24	Aswa	66	402	
90	3191	15	_	147	Ashad	12	we	17	Feb		. 10	02.21		l <sup>w</sup>	102	
									_	<u> </u>				<u> </u>		

#### SOLAR-YEAR. LUNI-SOLAR-YEAR. JUPITER-CYCLES. Sapt. Rishi. 60 Years. Vik. Intercal Sak Initial Days. Kali Initial A. D. Yuga. Day. Years. S. Sid. Tel. 15 Mar Tu 8 Mar 1. 16 54. 25 Kårt ... \*92 ... Sa 25 Feb Agra Vais Th 14 Feb Paush We Б Mar Mågh .... Bhåd Phál Sa 21 Feb \*96 Sa 12 Mar Chait .... We 1 Mar Vais .... 3199 15 Srav S 18 Feb Jyesh Sa Mar Ashad .... \*100 We 26 Feb \_ Srâv .... 3202 15 Mar Jyesh Mo 15 Feb Bhad 6 Mar \_ S Aswa ... Th 23 Feb \_ Kart .... \*104 -Chait Mo 12 Feb Agra Mo 3 Mar Paush .... Sråv Fr 20 Feb Mâgh Th 11 Mar Phâl .... \*108 Mo 28 Feb ... Chait Ashad Sa 17 Feb Vais Fr 8 Mar Jyesh ... 15 Mar Tu 25 Feb Ashad .... \*112 -Vais Sa 14 Feb Srav Sa 5 Mar .... Bhad -Bhåd Tu 21 Feb Aswa -Mo 12 Mar Kart .... \*116 -Sa ... Mar Agra Sráv We 18 Feb Paush Tu 9 Mar ... Mâgh Sa 26 Feb Phål .... \*120 -Jyesh We 15 Feb 1. 45 54. 54 Chait

A.D.	27 28 29	D 15 15 15 15 15 15 15 15 15 15	Mar 	Vik. Sam 178 179 180 181 182 183 184 185	Intercal Month. † Chait  Srâv 	Sak Sal. 43 44 45 46 47	We S Th Th	6 23	Day. Mar Feb Feb	S. Sid. 1. 46 47 48	ears. Tel. 54. 55 56 57	12 Years. Vais Jyesh Ashad	00 6 6 6 6 8 10 Sapt. Rishi.	.ura Las Rel. Era.	Gunt. Kål
121 122 123 *124 125 126 127 *128 129	3222 23 24 25 26 27 28 29 30	15 15 15 15 15 15 15 15 15	Mar 	Sam 178 179 180 181 182 183 184	Month.  t Chait  Srâv 	43 44 45 46 47	We S Th Th	6 23 12	Mar Feb Feb	1. 46 47 48	54. 55 56 57	Vais Jyesh Ashad	97 98 99	433 434 435	Gunt
122 123 *124 125 126 127 *128 129	23 24 25 26 27 28 29 30	15 15 15 15 15 15	1111111	179 180 181 182 183 184	† Chait  Srâv 	44 45 46 47	S Th Th	23 12	Feb Feb	47 48	56 57	Jyesh Ashad	98 99	434 435	
123 *124 125 126 127 *128 129	24 25 26 27 28 29 30	15 15 15 15 15 15	111111	180 181 182 183 184	Chait  Srâv 	45 46 47	Th Th	12	Feb	48	57	Ashad	99	435	
*124 125 126 127 *128 129	25 26 27 28 29 30	15 15 15 15 15	TITI	181 182 183 184	 Srâv	46 47	Th	102				100 C 100 C 10	1.2.5	100	
125 126 127 •128 129	26 27 28 29 30	15 15 15 15	1111	182 183 184	Srâv 	47	100	2	100.11			1.000	100	1000	
126 127 *128 129	27 28 29 30	15 15 15 15	111	183 184		1.2.2	1000		Mar	49	58	Srâv	100	436	
127 *128 129	28 29 30	15 15 15	Ξ	184		1.5	Mo	20	Feb	50	59	Bhâd	1	437	
*128 129	29 30	15 15	-	166.6		48	s	11	Mar	51	60	Aswa	2	438	
129	30	15		185		49	Mo	28	Feb	52	55. 1	Kârt	3	439	
	1000	192	-		Ashad	50	Fr	17	Feb	53	2	Agra	4	440	
130	3231	15		186		51	Mo	8	Mar	54	3	Paush	Б	441	
			-	187		52	Fr	25	Feb	55	4	Mâgh	6	442	
131	3232	15	Mar	188	Vais	53	Tu	14	Feb	56	Б	Phâl	7	443	
*132	33	15	4	189		54	s		Mar	67	6	Chait	8	444	
133	34	15	4	190	Bhåd	55	Fr	21	Feb	58	7	Vais	9	445	
134	35	15	-	191		56	Th	12	Mar	59	8	Jyesh	10	446	
135	36	15	-	192		57	Mo	1	Mar	60	9	Ashad	11	447	
*136	37	15	-	193	Srâv	58	Fr	18	Feb	2. 1	10	Srâv	12	448	
137	38	15	-	194		59	Fr	9	Mar	2	11	Bhâd	13	449	
138	39	15	-	195		60	Tu	26	Feb	8	12	Aswa	14	450	
139	40	15	-	196	Jyesh	61	Tu	15	Feb	4	13	Kårt	15	451	
*140	3241	15	-	197		62	Sa	6	Mar	• 6	14	• Paush	16	452	
<b>‡141</b>	3242	15	Mar	198	Aswa	63	We	23	Feb	7	15	Màgh	17	453	
142	43	15	-	199		64	We	12	Feb	8	16	Phâl	18	454	
143	44	15	-	200		65	Sa	3	Mar	9	17	Chait	19	455	
*144	45	15	-	201	Srâv	66	Sa	20	Feb	10	18	Vais	20	456	
145	46	15	-	202		67	We	11	Mar	11	19	Jyesh	21	457	
146	47		-	203		68	We	28	Feb	12	20	Ashad	22	458	
147	1.11		-	204	Jyesh	69	s		Feb	13	21	Srâv	23	.459	
*148	49		-	205		70	Th		Mar	14	22	Bhåd	21	460	
149 150	50 3251		1	206 207	 Vais	71	Mo Mo		Feb Feb	15 2.16	23 55. 24	Aswa Kârt	25 26	461 462	

## General Table of Corresponding Dates.

† Kartik omitted, and Aswa intercalary.

‡ Margasiras, or Agrahayana, omitted.

#### GENERAL TABLE OF CORRESPONDING DATES.

#### TABLE XVII.--(Continued.)

	SOLAT	R-Y	EAR.		LUNI-S	OLAR	YE	R.		JUP	ITER-C	YCLES.			1
	Kali	In	itial	Vik	Intercal	Sak	Tait	1.1	Dav.	60 Y	ears.	12	Rishi.	Era.	KAL
A. D.	Yuga.	D	ay.	Sam	Month.	Sal.	Int	4.81	Day.	S. Sid.	Tel.	Years.	Sapt.	Sel. E	Gupt
211	3312	16	Mar	268		133	Fr	1	Mar	3. 17	56. 25	Agra	87	523	4:
* 212	13	16	-	269	Ashad	134	Tu	18	Feb	18	26	Paush	88	524	4
213	14	16	-	270		135	Tu	9	Mar	19	27	Mågh	89	525	4
214	15	16	-	271		136	Sa	26	Feb	20	28	Phâl	90	526	4
215	16	16	-	272	Jyesh	137	We	15	Feb	21	29	Chait	91	527	4
* 216	17	16	1	273		138	We	6	Mar	22	30	Vais	92	528	2
217	18	16	-	274	Aswa	139	S	23	Feb	23	31	Jyesh	93	529	5
218	19	16	-	275		140	Sa	14	Mar	24	32	Ashad	94	530	5
219	20	16	1	276		141	We	3	Mar	25	33	Sråv	95	531	5
• 220	3321	16	-	277	Srâv	142	s	20	Feb	26	34	Bhâd	96	532	54
221	3322	16	Mar	278		143	s	11	Mar	27	35	Aswa	97	533	5
222	23	16	-	279		144	Th	28	Feb	28	36	Kårt	98	534	5
223	24	16	-	280	Jyesh	145	Mo	17	Feb	29	37	Agra	99	535	5
• 224	25	16	_	281		146	Mo	8	Mar	30	38	Paush	100	536	5
225	26	16	-	282		147	Fr	25	Feb	• 32	39	• Phâl	1	537	5
226	27	16	-	283	Chait	148	Tu	14	Feb	33	40	Chait	2	538	6
227	28	16	-	284		149	Mo	5	Mar	34	41	Vais	3	539	6
* 228	29	16	_	285	Srâv	150	Th	21	Feb	35	42	Jyesh	4	540	6
229	30	16	-	286		151	Th	12	Mar	36	43	Ashad	5	541	6
230	3331	16	-	287		152	Mo	1	Mar	37	44	Sråv	6	542	6
231	3332	16	Mar	288	Ashad	153	Fr	18	Feb	38	45	Bhâd	7	543	6
* 232	33	16	-	289		154	Fr	9	Mar	39	46	Aswa	8	544	6
233	34	16	-	290		155	Tu	26	Feb	40	47	Kârt	9	545	6
234	35	16	-	291	Vais	156	Tu	15	Feb	41	48	Agra	10	546	6
235	36	16	-	292		157	Mo	6	Mar	42	49	Paush	11	547	
* 236	37	16	-	293	Bhâd	158	Fr	23	Feb	43	50	Mâgh	12	548	7
237	38	16	-	294		159	Fr	14	Mar	44	51	Phâl	13	549	17
238	39	16	-	295		160	Tu	3	Mar	45	52	Chait	14	550	7
239	40	16	-	296	Sråv	161	We	20	Feb	46	53	Vais	15		7
*240	3341	16	-	297		162	We	11	Mar	3. 47	56. 54	Jyesh	16		1

## General Table of Corresponding Dates.

	SOLAR	-YI	AR.		LUNI-S	SOLAI	R-YE	AR	•	JUP	ITER-C:	ICLES.			
	Kali	Ini	itial	Vik	Intercal	Sak				60 Y	ears.	12	Rishi.	Sam.	Kal.
A. D.	Yuga.	-	ay.	Sam		Sal.	Ini	tial	Day.	S. Sid.	Tel.	Years.	Sapt. Rishi.	Chedi Sam.	Gupt.
241	3342	16	Mar	298		163	s	28	Feb	3.48	56.55	Ashad	17		72
242	43	16	-	299	Jyesh	164	We	17	Feb	49	56	Srâv	18		76
243	44	16	-	300		165	We	8	Mar	50	57	Bhåd	19	1.1	77
*244	45	16	-	301		166	s	25	Feb	51	58	Aswa	20		78
245	46	16	-	302	Chait	167	Fr	14	Feb	52	59	Kârt	21		79
246	47	16	=	303		168	Th	5	Mar	53	60	Agra	22		80
247	48	16	_	304	Sråv	169	S	21	Feb	54	57. 1	Paush	23		81
*248	49	16	-	305		170	s	12	Mar	58	2	Mâgh	24		82
249	50	16	_	306		171	Th	1	Mar	56	3	Phâl	25	0	83
250	3351	16	-	307	Ashad	172	Mo	18	Feb	57	4	Chait	26	1	84
251	3352	16	Mar	308		173	s	9	Mar	58	Б	Vais	27	2	82
*252	53	16	_	309		174	Th	26	Feb	59	6	Jyesh	28	3	86
253	54	16	1	310	Vais	175	Tu	15	Feb	60	7	Ashad	29	4	87
254	55	16	_	311		176	Mo	6	Mar	4.1	8	Sråv	30	5	88
255	56	16	-	312	Bhâd	177	Fr	23	Feb	2	9	Bhâd	31	6	8
*256	57	16	-	313		178	Fr	14	Mar	3	10	Aswa	32	7	90
257	58	16	-	314		179	Tu	3	Mar	4	11	Kârt	33	8	91
258	59	16	-	315	Sråv	180	Sa	20	Feb	5	12	Agra	34	9	95
259	60	16	-	316		181	Fr	11	Mar	6	13	Paush	35	10	93
*260	3361	16	-	317		182	Tu	28	Feb	7	14	Mågh	36	11	94
261	3362	16	Mar	318	Jyesh	183	s	17	Feb	8	15	Phâl	37	12	95
262	63	16	-	319		184	Sa	8	Mar	9	16	Chait	38	13	96
263	64	16	-	320	t	185	We	25	Feb	10	17	Vais	39	14	97
*264	65	16	-	321	Chait	186	s	14	Feb	11	18	Jyesh	40	15	98
265	66	16	-	322		187	S	5	Mar	12	19	Ashad	41	16	99
266	67	16	-	323	Sråv	188	We	21	Feb	13	20	Sráv	42	17	100
267	68	16	-	324		189	Tu	12	Mar	14	21	Bhåd	43	18	101
*268	69	16	-	325		190	S	1	Mar	15	22	Aswa	44	19	102
269	70	16	-	326	Ashad	191	Th	18	Feb	16	23	Kârt	45	20	103
270	3371	17	-	327		192	We	9	Mar	4.17	57.24	Agra	46	21	10

† Kartika omitted, and Kartika intercalary.

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General !	Table	of	Corresponding	Dates.
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	SOLAT	-YE	AR.		LUNI-S	OLAR	YE.	AR.		JUPI	TER-CY	CLES.	
A. D.	Kali	Ini	tial	Vik	Intercal	Sak				60 Y	ears.	12	1111
A. D.	Yuga.		ay.	Sam		Sal	Init	ial	Day.	S. Sid.	Tel.	Years.	Did to a
271	3372	17	Mar	328		193	s	26	Feb	4.18	57.25	Paush	4
* 272	73	16	_	329	Vais	194	Th	15	Feb	19	26	Mâgh	4
273	74	17	-	330		195	Th	6	Mar	20	27	Phâl	4
274	75	17	-	331	Bhåd	196	Mo	23	Feb	21	28	Chait	1
275	76	17	-	332		197	Mo	14	Mar	22	29	Vais	1
* 276	77	16	-	333		198	Fr	3	Mar	23	30	Jyesh	1
277	78	17	-	334	Srâv	199	Tu	20	Feb	24	31	Ashad	1
278	79	17	4	335		200	Mo	11	Mar	25	32	Srâv	1
279	80	17	-	336		201	Fr	28	Feb	26	33	Bhåd	1
* 280	3381	16	-	337	Jyesh	202	Tu	17	Feb	27	34	Aswa	1
281	3382	17	Mar	338		203	Tu	8	Mar	28	35	Kârt	
282	83	17	-	339	t	204	Sa	25	Feb	29	36	Agra	
283	84	17	_	340	Chait	205	We		Feb	30	37	Paush	
* 284	85	16	_	341		206	We	5	Mar	31	38	Mâgh	
285	86	17	2	342	Srâv	207	Sa	21	Feb	32	39	Phâl	1
286	87	17	_	343		208	Fr		Mar	33	40	Chait	b
287	88	17	-	344		209	Tu		Mar	34	41	Vais	1
* 288	89	16	-	345	Jyesh	210	Sa	18	Feb	35	42	Jyesh	k
289	90	17	-	346		211	Sa	9	Mar	36	43	Ashad	
290	3391	17	-	347		212	We	26	Feb	37	44	Sråv	ľ
291	3392	17	Mar	348	Vais	213	s	15	Feb	38	45	Bhâd	
* 292	93	16	-	349		214	s	6	Mar	39	46	Aswa	Ŀ
293	94	17	-	350	Bhåd	215	Th	23	Feb	40	47	Kârt	Ŀ
294	95	17	-	351		216	We	14	Mar	41	48	Agra	
295	96	17	-	352		217	S	3	Mar	42	49	Paush	Ŀ
* 296	97	16	-	353	Ashad	218	Th	20	Feb	43	50	Mâgh	
297	98	17	-	354		219	Th	11	Mar	44	51	Phâl	Ŀ
298	99	17	-	355		220	Mo	28	Feb	45	52	Chait	Ŀ
299	3400	17	÷	356	Jyesh	221	Fr	17	Feb	46	53	Vais	Ŀ
* 300	3401	16	-	357		222	Fr	8	Mar	4.47	57.54	Jyesh	Ŀ

† Agrahayna omitted and Aswina intercalary.

	SOLAT	R-YI	EAR.		LUNI-S	OLAI	P-YEAR	z.		JUP	TTER-C	YCLES.			
A. D.	Kali		itial		Intercal	Sak	Initi	al Da	v.	60 Y	ears.	12	Sapt. Rishi.	i Sam.	Kâl.
	Yuga.	D	ay.	Sam	Month.	Sal.			-	S. Sid.	Tel.	Years.	Sapt.	Chedi	Gupt.
301	3402	17	Mar	358	Aswa	223	Tu 2	F	b	4.48	57.55	Ashad	77	52	13
302	03	17	_	353		224	1.			49	56		78	53	13
303	04	17	-	360		225	Sec. 2.		Ir	50	57	Bhâd	79	54	13
*304	05	16	-	361	Sråv	226	Mo 2	I Fe	b	51	58	Aswa	80	55	13
305	06	17	-	362		227	Mo 1	2 Ma	r	52	59	Kärt	81	56	13
306	07	17	-	363		228	Fr	Ma	ır	53	60	Agra	82	57	14
307	08	17	-	364	Jyesh	229	Tu 1	s Fe	b	54	58.1	Paush	83	58	14
*308	09	16	-	365		230	Tu :	M	r	55	2	Mâgh	78	59	14
309	10	17		366		231	Sa 2	5 Fe	b	56	3	Phâl	85	60	14
310	3411	17	1	367	Vais	232	We 1	5 Fe	b	• 58	4	• Vais	86	61	14
311	3412	17	Mar	368		233	S	5 Ma	r	59	5	Jyesh	87	62	14
*312	13	16	-	369	Bhād	234		Fe	b	60	6	Ashad	88	63	14
313	14	17	-	370		235	Sa 1	Ma	r	5.1	7	Srâv	89	64	14
814	15	17	-	371		236	We :	Ma	r	2	8	Bhåd	90	65	14
315	16	17	-	372	Vais	237	S 20	) Fe	b	3	9	Aswa	91	66	14
*316	17	16	-	373		238	S 1	Ma	r	4	10	Kârt	92	67	15
317	18	17	-	374		239	Th 2	B Fe	b	5	11	Agra	93	68	15
318	19	17	-	375	Jyesh	240	Mo 1	Fe	b	6	12	Paush	94	69	15
319	20	17	-	376		241	SI	Ma	r	7	13	Mågh	95	70	15;
*320	3421	17	-	377	Aswa	242	Th 2	5 Fe	b	8	14	Phâl	96	71	15
321	3422		-	378		243	Th 16	Ma	r	9	15	Chait	97	72	150
322	23		-	379		214	Mo 5	Ma	r	10	16	Vais	98	73	15
323	24		-	380	Sråv		Th 21			11	17	Jyesh	99	74	157
*324	25		-	381			Th 12			12	18	Ashad	100	75	158
325	26		-	382			Mo 1			13	19	Sråv	1	76	159
326	27		-	383	Jyesh	10 mm	Fr 18			14	20	Bhâd	2	77	160
327	28		-	384			Th 9			15	21	Aswa	3	78	16)
*328	29		-	385			Mo 26			16	22	Kårt	4	79	16:
329	30		-	386	Vais		Sa 15			17	23	Agra	5	80	163
330	3431		-	387		252	Fr 6	Max		5.18	58.24	Paush	6	81	16:

## General Table of Corresponding Dates.

	SOLAR	YEAR.	1	LUNI-S	OLAR	YEA	R.		JUPI	TER-CY	CLES.	
A.D.	Kali	Initial		Intercal		Init	ial	Day.	60 Y	ears.	12	Diabi
	Yuga.	Day.	Sam	Month.	Sal.		idi	Day.	S. Sid.	Tel.	Years.	Gant
331	3432	17 Mar	388	Bhâd	253	Tu	23	Feb	5.19	58.25	Mågh	
*332	33	-	389		254	Tu	14	Mar	20	26	Phâl	L
333	34	-	390		255	Sa	3	Mar	21	27	Chait	Ŀ
334	35	-	391	Ashad	256	We	20	Feb	22	28	Vais	1
335	36		392		257	Tu	11	Mar	23	29	Jyesh	1
*336	37	_	393		258	Sa	28	Feb	24	30	Ashad	
337	38	-	394	Jyesh	259	S	17	Feb	25	31	Sråv	1
338	39	-	395		260	We	8	Mar	26	32	Bhåd	1
339	40	-	396	Aswa	261	S	25	Feb	27	33	Aswa	
*340	3441	-	397		262	S	16	Mar	28	34	Kârt	1
341	3442		398		263	Th	5	Mar	29	35	Agra	1
342	43	-	399	1.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	264	Th	21	Feb	30	36	Paush	Ŀ
343	44	-	400		265	Sa	12	Mar	\$1	37	Mâgh	
*344	45	-	401		266	10.5	1	Mar	32	38	Phâl	1
315	46	-	402	Jyesh	267	Mo	18	Feb	33	39	Chait	
346	47	-	403		268	s		Mar	34	40	Vais	
347	48	-	404		269	Th		Feb	35	41	Jyesh	
*348	49	-	405	Chait	270	1.1	15	Feb	86	42	Ashad	
349	50	_	406		271	Mo	6	Mar	37	43	Srâv	Í
350	3451	-	407	Srâv	272	Fr	23	Feb	38	44	Bhåd	1
351	8452	. <u></u>	408		978	Th	14	Mar	39	45	Aswa	
*352	53		409		274	Tu		Mar	40	46	Kårt	
353	54	_	410		275	12.2		Feb	41	47	Agra	
354	55	-	411			Fr		Mar	42	48		
355	56	_	412			Tu		Feb	43	49	Mågh	
*356	57	_	413					Feb	44	50	Phâl	
357	58	1	414					Mar	45	51	Chait	
358	59	-	415					Feb	46	52	Vais	
359	60	_	416	I show the set				Mar		53	Jyesh	
*360	3461	1.3	417			S		Mar	5.48		Ashad	Ľ

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	SOLAT	R-YEAR.	00	LUNI-S	OLAR	-YE	AR.		JUP	TER-CY	CLES.			
A.D.	Kali	Initial	Vik.	Intercal	Sak				60 Y	ears.	12	Rishi.	Sam.	Kal.
	Yuga.	Day.	Sam		Sal.	Init	tial	Day.	S. Sid.	Tel.	Years.	Sapt. Rishi.	Chedi Sam	Gupt. 1
361	3462	17 Mar	418	Ashad	283	We	21	Feb	5.49	58.55	Srâv	37	112	19
362	63	_	419		284	Tu	12	Mar	50	56	Bhâd	38	113	19
363	64	-	420		285	Sa	1	Mar	51	57	Aswa	39	114	19
*364	65	-	421	Jyesh	286	We	18	Mar	52	58	Kårt	40	115	19
365	66	-	422		287	We	9	Mar	53	59	Agra	41	116	19
366	67	-	423	Phâl	288	s	26	Feb	54	60	Paush	42	117	20
367	68	-	424		289	Sa	17	Mar	55	59. 1	Mâgh	43	118	20
*368	69		425	Srâv	290	We	6	Mar	56	2	Phâl	44	119	20
369	70	1	426		291	Mo	23	Feb	57	3	Chait	45	120	20
370	3471	-	427		292	S	14	Mar	58	4	Vais	46	121	20
371	3472		428		293	Th	3	Mar	59	5	Jyesh	47	122	20
*372	73		429	Ashad	293	Mo		Feb	60	6	Ashad	48	123	20
373	74	1.1.1	430	1 Carringer	294	Mo		Mar	6.1	7	Srâv	49	124	20
374	75		431		296	Fr		Feb	2	8	Bhâd	50	125	20
375	76	1	432	 Vais	297	Tu		Feb		9	Aswa	51	126	20
*376	77		433		298	Tu	12.1	Mar	4	10	Kårt	52	127	21
377	78	12	434	Bhâd	299	Sa		Feb	5	11	Agra	53	128	21
378	79		435		300			Mar	6	12	Paush	54	129	21
379	80	1.20	436		301	Tu		Mar	7	13	Mâgh	55	130	21
•380	3481	Ξ	437	Ashad	302	Fr		Feb	8	14	Phâl	56	131	21
581	3482	4	438		303	Fr	12	Mar	9	15	Chait	57	132	21
382	83	-	439		304	Tu	1	Mar	10	16	Vais	58	133	21
383	84	-	440	Jyesh	305	Sa	18	Feb	11	17	Jyesh	59	134	21
*381	85	-	441		306			Mar		18	Ashad	60	135	21
385	86	-	442	Phâl	307	We	26	Feb	13	19	Srâv	61	136	21
386	87	-	443		308	Tu	17	Mar	14	20	Bhåd	62	137	22
387	88	-	444		309	Sa	6	Mar	15	21	Aswa	63	138	22
*388	89	1.4	445	Sråv	310	We	23	Feb	16	22	Kârt	64	139	22
389	90	-	446				14	Mar	17	23	Agra	65	140	22
390	3491	-	+47		312	S	3	Mar	6.18	59.24	Paush	66	141	22

	SOLAR	-YEAR.	1	LUNI-S	OLAB	YEA	R.		JUP	TER-C	YCLES.			
	Kali	Initial	Vik.	Intercal	Sak				60 Y	ears.	12	Sapt. Rishi.	Chedi Sam.	Kal.
A. D.	Yuga,	Day.	Sam	Month.	Sal.	Init	ial .	Day.	S. Sid.	Tel.	Years.	Sapt.	Chedi	Gupt.
391	3492	17 Mar	448	Ashad	313	Th	20	Feb	6.19	59.25	Mâgh	67	142	22
*392	93		449		314	Th		Mar	20	26	Phâl	68	143	22
393	94	1	450		315	1.00	199	Feb	21	27	Chait	69	144	22
394	95	1.24	451	Vais	316	1.2.1		Feb	22	28	Vais	70	145	22
395	96	12	452	Tals	317	Th		Mar	•24	29	Ashad	71	146	22
*396	97	1	453	Bhâd	318	1000		Feb	25	30	Sråv	72	147	23
397	98	-	454		319	1001		Mar		31	Bhâd	73	148	23
398	99		455		320	Fr		Mar		32	Aswa	74	149	23
399	3500	-	456	Ashad	321	Mo	0.2	Feb	28	33	Kârt	75	150	23
*400	3501	17 —	457		322	Mo	12	Mar	29	34	Agra	76	151	23
401	3502	18 —	458		323	Fr	1	Mar	30	35	Paush	77	152	23
402	03	18 -	459	Jyesh	324	Tu	18	Feb	31	36	Mâgh	78	153	23
403	04	18 —	460		325	Mo	9	Mar	32	37	Phâl	79	154	23
*404	05	17 -	461	t	326	Fr	26	Feb	33	38	Chait	80	155	
405	06	18 -	462	Chait	327	We	15	Feb	34	39	Vais	81	156	23
406	07	18 -	463		328	Tu	6	Mar	35	40	Jyesh	82	157	24
407	08	18 -	464	Srâv	329	Sa	23	Feb	36	41	Ashad	83	158	24
*408	09	17 -	465		330	Sa	14	Mar	37	42	Sråv	84	159	24
409	10	18 -	466		331	We	3	Mar	38	43	Bhåd	85	160	
410	3511	18 —	467	Ashad	332	s	20	Feb	39	44	Aswa	86	161	24
411	3512	18 —	468		333	Sa	11	Mar	40	45	Kârt	87	162	
*412	13	17 -	469		334	We	28	Feb	41	46	Agra	88	163	12.
413	14	18 —	470	Vais	335	Mo	17	Feb	42	47	Paush	89	164	
414	15	18 —	471		336	s	8	Mar	43	48	Mågh	90	165	
415	16	18	472	Bhâd	337	Th	25	Feb	44	49	Phâl	91	166	
*416	17	18 —	473		338	Th	16	Mar	45	50	Chait	92	167	2
417	18	18 —	474		339	Mo	5	Mar	46	51	Vais	93	168	
418	19	18 —	475	Ashad	340		21	Feb	47	52	Jyesh	94	169	
419	20	18 —	476		341	We	12	Mar	48	53	Ashad	95	170	
*420	3521	18 —	477		342	Mo	1	Mar	6.49	59.54	Srâv	96	171	2

## General Table of Corresponding Dates.

† Kårtika retrenched and Kårtika intercalary.

#### General Table of Corresponding Dates.

	SOLAT	R-YEAR.		LUNI-S	OLAR	-YE	R.		JUP	TER-C	YCLES.			
AD.	Kali	Initial	Vik	Intercal		Init	ial	Day.	60 Y	ears.	12 Years.	Rishi.	Sam.	Kâl.
	Yuga.	Day.	Sam	Month.	Sal.			Day.	S. Sid.	Tel.		Sapt.	Ghedi	Gupt.
421	3522		478	Jyesh	343	Fr	18	Feb	6.50	59.55	Bhâd	97	172	250
422	23		479		344	Th	9	Mar	51	56	Aswa	98	173	256
423	24		480	t	345	Mo	26	Feb	52	57	Kârt	99	174	251
*424	25		481	Chait	346	Fr	15	Feb	53	58	Agra	100	175	258
425	26		482		347	Fr	6	Mar	54	59	Paush	1	176	25
426	27		483	Srâv	348	Tu	23	Feb	55	60	Mägh	2	177	260
427	28		484		349	Mo	14	Mar	56	60.1	Phâl	3	178	26)
*428	29		485		350	Sa	3	Mar	57	2	Chait	4	179	265
429	30		486	Jyesh	351	We	20	Feb	58	3	Vais	5	180	263
430	3531		487		352	Tu	11	Mar	59	4	Jyesh	6	181	264
431	3532		488		353	Sa	28	Feb	60	5	Ashad	7	182	264
*432	33		489	Vais	354	We	17	Feb	7.1	6	Sråv	8	183	26
433	34		490		355	We	8	Mar	2	7	Bhâd	9	184	26
434	35		491	Bhâd	356	S	25	Feb	3	8	Aswa	10	185	26
435	36		492		357	Sa	16	Mar	4	9	Kârt	11	186	26
*436	37		493	***	358	Th	5	Mar	5	10	Agra	12	187	270
437	38		494	Ashad	359	S	21	Feb	6	- 11	Paush	13	188	271
438	39		495		360	Sa	12	Mar	7	12	Mâgh	14	190	275
439	40		496		361	We	1	Mar	8	13	Phâl	15	190	27
*440	3541		497	Jyesh	362	S	18	Feb	9	14	Chait	16	191	27
441	3542		498		363	s	9	Mar	10	15	Vais	17	192	271
442	43	1 Mar 1	499	Bhâd	364	Th	26	Feb	11	16	Jyesh	18	193	276
443	44	-	500		365	We	17	Mar	12	17	Ashad	19	194	277
*444	45	100 10	501		366	Mo	6	Mar	13	18	Srâv	20	195	278
445	46	-	502	Srâv	367	Fr	23	Feb	14	19	Bhåd	21	196	275
446	47		503		368	Th	14	Mar	15	20	Aswa	22	197	280
447	48	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	504		369	Mo	3	Mar	16	21	Kârt	23	198	281
*448	49	- 1	505	Jyesh	370	Fr	20	Feb	17	22	Agra	24	199	28:
449	50	an 13	506		371	Fr	11	Mar	18	23	Paush	25	200	28
450	3551	120 3	507		372	Tu	28	Feb	7.19	60,24	Mâgh	26	201	284

† Agrahayana omitted, Aswina intercalary.

## General Table of Corresponding Dates.

	SOLAT	-YEAR.		LUNI-Se	OLAR	YEAR.		JUPP	TER-CY	CLES.			
	Kali	Initial	Vik	Intercal	Sak			60 Y	ears.	12	Rishi.	Sam.	KAl.
A, D,	Yuga.	Day.	Sam	Month.	Sal.	Initial	Day.	S. Sid.	Tel.	Years.	Sapt.	Chedh Sam.	Gupt.
451	3552		508	Vais	373	Sa 17	Feb	7.20	60.25	Phâl	27	2)2	28
*152	53		509		374	Sa 8	Mar	21	26	Chait	28	203	28
453	54		510	Bhâd	375	We 25	Feb	22	27	Vais	29	204	28
453	55		511		376	Tu 16	Mar	23	28	Jyesh	30	205	28
455	56		512		377	Sa 5	Mar	24	29	Ashad	31	206	28
*456	57		513	Ashad	378	Tu 21	Feb	25	30	Srâv	32	207	29
457	58		514		379	Tu 12	Mar	26	31	Bhad	33	208	29
458	59		515		380	Sa 1	Mar	27	32	Aswa	34	209	29
459	60		516	Jyesh	381	We 18	Feb	28	33	Kårt	35	210	29
*460	3561		517		382	We 9	Mar	29	34	Agra	36	211	29
461	3562		518	Bhâd	383	S 26	Feb	30	35	Paush	37	212	29
462	63		519		384	Fr 16	Mar	31	36	Mågh	38	213	25
463	64		520		385	We 6	Mar	32	37	Phâl	39	214	25
*464	65		521	Srâv	386	S 23	Feb	33	38	Chait	40	215	2
465	66		522		387	S 14	Mar	34	39	Vais	41	216	2
466	67		523		388	Th 3	Mar	35	40	Jyesh	42	217	3
467	68		524	Jyesh	389	Mo 20	Feb	36	41	Ashad	43	218	3
*168	69		525		390	Mo 11	Mar	37	42	Srâv	44	219	3
469	70		526	t	391	Fr 28	Feb	38	43	Bhåd	45	220	3
470	3571		527	Vais	392	Tu 17	Feb	39	44	Aswa	46	221	3
471	3572		528		393	Th 8	Mar	40	45	Kârt	47	222	3
*472	73		529	Bhâd	394	Fr 25	Feb	41	46	Agra	48	223	30
473	74		530		395	Fr 16	Mar	42	47	Paush	49	224	3
474	75		531		396	Tu 5	Mar	43	48	Mâgh	50	225	3
475	76		532	Ashad	397	Fr 21	Feb	44	49	Phâl	51	226	3
*476	77		533		398	Fr 12	Mar	45	50	Chait	52	227	3
477	78		534		399	Tu 1	Mar	46	51	Vais	53	228	3
478	79		535	Jyesh	400	Sa 18	Feb	47	52	Jyesh	54	229	3
479	80		536		401	Fr 9	Mar	7.48	53	Ashad	55	230	3
*480	3581		537	Aswa	402	Tu 26	Feb	6 50	60,54	• Bhâd	56	231	3

† Kârtika omitted, and Kârtika intercalary.

### General Table of Corresponding Dates.

	SOLA	R-YEAR,		LUNI-S	SOLAI	R-YEAT	R.		JUP	TER-C	YCLES.			
A.D.	Kali	Initial	Vik	Intercal	Sak	Initia	1	Den	60 Y	ears.	12	Rishi.	Sam.	Kâl.
	Yuga.	Day.	Sam	Month.	Sal.	Initia	a1	Day.	S. Sid.	Tel.	Years.	Sapt. Rishi.	Chedi Sam.	Gupt.
481	3582		538		403	Tu 1	7	Mar	7.51	60.55	Aswa	57	232	31
482	83		539		404	Sa	6	Mar	52	56	Kârt	58	233	31
483	84		540	Sråv	405	We 2	23	Feb	53	57	Agra	59	234	3
*484	85		541		406	We 1	4	Mar	54	58	Paush	60	235	3
485	86		542	· · · ·	407	s	3	Mar	55	59	Mâgh	61	236	3
486	87		543	Jyesh	408	Th 2	0	Feb	56	60	Phâl	62	237	3
487	88		544		409	We 1	1	Mar	57	61.1	Chait	63	238	3:
*488	89	0	545	t	410	Mo 2	8	Feb	58	2	Vais	64	239	3
489	90		546	Chait	411	Fr 1	7	Feb	59	3	Jyesh	65	240	3
490	3591		547		412	Th	8	Mar	60	4	Ashad	66	241	3:
491	3592		548	Bhâd	413	Mo 2	5	Feb	8. 1	5	Srâv	67	242	35
*492	93	111	549		414	Mo 1		2771	2	6	Bhâd	68	243	3
493	94	1000	550		415	Fr	5 3	Mar	3	7	Aswa	69	244	3
494	95	1.1.1	551	Ashad	416	Mo 2	1	Feb	4	8	Kårt	70	245	3
495	96	CU 14	552		417	S 1	2 1	Mar	5	9	Agra	71	246	3
*496	97	1.1	553		418	Fr :	11	Mar	6	10	Paush	72	247	3
497	98		554	Jyesh	419	Tu I	8	Feb	7	11	Mâgh	73	248	3
498	99		555		420	Mo s	9 1	Mar	8	12	Phâl	74	249	3
499	3600		556	Aswa	421	Fr 2	6	Feb	9	13	Chait	75	250	3
*500	3601		557		422	Fr 17	1	Mar	10	14	Vais	76	251	3
501	3602		558		423	Ta (	; ]	Mar	11	15	Jyesh	77	252	3
502	03		559	Ashad	424	Sa 23	3	Feb	12	16	Ashad	78	253	3
503	04		560		425	Fr 14	1	Mar	13	17	Sråv	79	254	3
*504	05		561		426	We a	3 ]	Mar	14	18	Bhåd	80	255	3
505	06	- 1	562	Jyesh	427	S 20	) )	Feb	15	19	Aswa	81	256	3
506	07		563		428	Sa 11	1	Mar	16	20	Kårt	82	257	3
507	208		564	Phâl	429	We 2	8	Feb	17	21	Agra	83	258	3
*508	09		565		430	We 1	9 1	Mar	18	22	Paush	84	259	3
509	10	1.1	566		431	S	8 3	Mar	19	23	Mâgh	85	260	3
510	3611	1.1	567	Srâv	432	Th 2	5 1	Feb	8,20	61.24	Phâl	86	261	3

	SOLAR	-YEAR.		LUNI-Se	OLAR	YE	AR.		JUPI	TER-CY	CLES.	
	Kali	Initial	With	Intercal	Sal	1			60 Y	ears.	12	Rishi.
A. D.	Yuga.	Day.		Month.	Sal.	Ini	tial	Day.	S. Sid.	Tel.	Years.	Sapt. 1
451	3552		508	Vais	373	Sa	17	Feb	7.20	60.25	Phâl	2
•152	53		509		374	Sa	8	Mar	21	26	Chait	2
453	54		510	Bhåd	375	We	25	Feb	22	27	Vais	2
453	55		511		376	Tu	16	Mar	23	28	Jyesh	3
455	56		512		377	Sa	5	Mar	24	29	Ashad	1
*456	57		513	Ashad	378	Tu	21	Feb	25	30	Sràv	3
457	58		514		379	Tu	12	Mar	26	31	Bhad	3
458	59		515		380	Sa	1	Mar	27	32	Aswa	1
459	60		516	Jyesh	381	We	18	Feb	28	33	Kårt	1
*460	3561		517		382	We	9	Mar	29	34	Agra	*
461	3562		518	Bhâd	383	s	26	Feb	30	35	Paush	
462	63		519		384	Fr	16	Mar	31	36	Mâgh	1
463	64		520		385	We	6	Mar	32	37	Phâl	1
*464	65		521	Sråv	386	s	23	Feb	33	38	Chait	3
465	66		522		387	s	14	Mar	34	39	Vais	1
466	67		523		388	Th	3	Mar	35	40	Jyesh	4
467	68		524	Jyesh	389	Mo	20	Feb	36	41	Ashad	4
*168	69		525		390	Mo	11	Mar	37	42	Srâv	4
469	70		526	t	391	Fr	28	Feb	38	43	Bhâd	4
470	3571		527	Vais	392	Tu	17	Feb	39	44	Aswa	4
471	3572		528		393	Th	8	Mar	40	45	Kårt	Ì.
*472	73		529	Bhåd	394	Fr	25	Feb	41	46	Agra	
473	74		530		395	Fr	16	Mar	42	47	Paush	1
474	75		531		396	Tu	5	Mar	43	48	Mågh	1
475	76		532	Ashad	397	Fr	21	Feb	44	49	Phál	
*476	77		533		398	Fr	12	Mar	45	50	Chait	1
477	78		534		399	Tu	1	Mar	46	51	Vais	
478	79		535	Jyesh	400	Sa	18	Feb	47	52	Jyesh	
479	80		536		401	Fr	9	Mar	7.48	53	Ashad	
*480	3581		537	Aswa	402	Tu	26	Feb	• 50	60.54	• Bhâd	

## General Table of Corresponding Dates.

† Kårtika omitted, and Kårtika intercalary.

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#### General Table of Corresponding Dates.

	SOLAI	R-YEAR.		LUNI-S	OLAI	e-YE	AR.		JUP	ITER-C	YCLES.			
A.D.	Kali	Initial	Vik	Intercal	Sak				60 Y	ears.	12	Rishi.	Sam.	Kål.
	Yuga.	Day.	Sam		Sal.	Init	tial	Day.	S. Sid.	Tel.	Years.	Sapt. Rishi.	Chedi Sam.	Gupt.
481	3582		538		403	Tu	17	Mar	7.51	60.55	Aswa	57	232	314
482	83		539		404	Sa	6	Mar	52	56	Kårt	58	233	310
483	84		540	Srâv	405	We	23	Feb	53	57	Agra	59	234	313
*484	85		541		406	We	14	Mar	54	58	Paush	60	235	318
485	86		542		407	S	3	Mar	55	59	Màgh	61	236	31
486	87		543	Jyesh	408	Th	20	Feb	56	60	Phâl	62	237	320
487	88		544		409	We	11	Mar	57	61.1	Chait	63	238	321
•488	89		545	t	410	Mo	28	Feb	58	2	Vais	64	239	325
489	90		546	Chait	411	Fr	17	Feb	59	3	Jyesh	65	240	323
490	3591		547		412	Th	8	Mar	60	4	Ashad	66	241	324
491	3592		548	Bhâd	413	Mo	25	Feb	8.1	5	Srâv	67	242	325
*492	93	1.01	549		414	Mo	16	Mar	2	6	Bhâd	68	243	326
493	94		550		415	Fr	5	Mar	3	7	Aswa	69	244	321
494	95	1.11	551	Ashad	416	Mo	21	Feb	4	8	Kârt	70	245	328
495	96	1.1	552		417	s	12	Mar	5	9	Agra	71	246	32
*496	97		553		418	Fr	1	Mar	6	10	Paush	72	247	330
497	98		554	Jyesh	419	Tu	18	Feb	7	11	Mågh	73	248	331
498	99	1.17	555		420	Mo	9	Mar	8	12	Phâl	74	249	335
499	3600	6.0	556	Aswa	421	Fr	26	Feb	9	13	Chait	75	250	333
*500	3601		557		422	Fr	17	Mar	10	14	Vais	76	251	334
501	3602	113	558		423	Tu	6	Mar	11	15	Jyesh	77	252	33/
502	03		559	Ashad	424	Sa		Feb	12	16	Ashad	78	253	336
503	04		560		425	Fr	14	Mar	13	17	Srâv	79	254	337
*504	05	1.11	561		426	We		Mar	14	18	Bhâd	80	255	338
505	06		562	Jyesh	427	S	20	Feb	15	19	Aswa	81	256	339
506	07		563		428	Sa	11	Mar	16	20	Kârt	82	257	340
507	<b>‡</b> 08	1.1	564	Phâl	429	We	28	Feb	17	21	Agra	83	258	34
*508	09	1.1.1.1	565		430	We	19	Mar	18	22	Paush	84	259	34
509	10		566		431	S	8	Mar	19	23	Mägh	85	260	343
510	3611		567	Srâv	432	Th	25	Feb	8.20	61.24	Phâl	86	261	34

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	SOLAI	R-YI	EAR.		LUNI-S	OLAR	YE!	R.		JUP	TER-CY	CLES.			
A. D.	Kali	In	itial	Vik	Intercal	Sak				60 Ye	ears.	12	Rishi.	Sam.	. Kal.
	Yuga.		ay.	Sam		Sal.	Init	ial	Day.	S. Sid	Tel.	Years.	Sapt. Rishi.	Chedi Sam.	Gupta.
571	3672	20	Mar	628		493	Fr	13	Mar	9.22	62.25	Vais	47	322	40
*572	73	19	-	629		494	We	2	Mar	23	26	Jyesh	48	323	40
573	74	19	-	630	Vais	495	Sa	18	Feb	24	27	Ashad	49	324	40
574	75	19	-	631		496	Fr	9	Mar	25	28	Srāv	50	325	40
575	76	20	-	632	Bhâd	497	We	27	Feb	26	29	Bhâd	51	326	40
*576	77	20	-	633		498	Tu	18	Mar	27	30	Aswa	52	327	41
577	78	19	-	634		499	Sa	6	Mar	28	31	Kårt	53	328	41
578	79	20	-	635	Ashad	500	Th	24	Feb	29	32	Agra	54	329	41
579	80	20	-	636		501	We	15	Mar	30	33	Paush	55	330	41
*580	3681	19	-	637		502	S	3	Mar	31	34	Mâgh	56	331	41
581	3682	19	Mar	638	Vnis	503	Th	20	Feb	32	35	Phâl	57	332	41
582	83		_	639		504	Th	-	Mar	33	36	Chait	58	333	
583	84		_	640	1. 1. 1. 1. 1. 1.	505			Feb	34	37	Vais	59	334	41
*584	85		_	641		506	S		Mar	35	38	Jyesh	60	335	41
585	86		4	642		507	F		Mar	36	39	Ashad	61	336	41
586	87		-	643	Siâv	508	Tu		Feb	37	40	Srâv	62	337	42
587	88		<u> </u>	644		509	S	-53	Mar	38	41	Bhâd	63	338	
*588	89		_	645		510	Fr		Mar	39	42	Aswa	64	339	1.5
589	90	20	_	646	Jyesh	511	Mo	21	Feb	40	43	Kârt	65	340	-
590	3691	20	-	647		512	Mo	13	Mar	41	44	Agra	66	341	42
591	3692	20	Mar	648		513	Fr	2	Mar	42	45	Paush	67	342	422
*592	1.1.1.1.1.1.1.1	19	_	649	Vais	514			Feb	43	46	Mågh	68	343	
593	94	19	_	650		515			Mar	44	47	Phâl	69	344	
594		20		651	Bhåd	12.23	Sa		Feb	45	48	Chait		345	
595		20		652		1 2 2 1	Fr			46	49	Vais		346	
*596		19		653			Tu		Mar					347	
597			-	654	1.0.0	519	Sa	23	Feb		51	Ashad	0.004	348	
598	1.1.1.2.1	20		655	- in -	520			Mar		52	Sråv		349	
599	3700			656		521	2.04		Mar	50	53	Bhâd		350	
*600	3701			657	Vais	522	Sa		Feb	9.51	Sec. 1	Aswa		351	

## General Table of Corresponding Dates.

£	SOLAI	R-YEAR.		LUNI-S	OLAR	-YEAR		JUP	ITER-C	YCLES.			
A, D.	Kali	Initial	Vik	Intercal	Sak	Initia	Der	60 Y	ears.	12	Rishi.	Sam.	Kal.
F	Yuga.	Day.	Sam	Month.	Sal.	Inicia	I Day.	S. Sid.	Tel-	Years.	Sapt. ]	Chedi Sam.	Gupt.
541	3642	19.Mar	598		463	Th 14	Mar	8.51	61.55	Aswa	17	292	37
542	43	19 -	599		464	Mo 3	Mar	52	56	Kârt	18	293	37
543	44	19 -	600	Jyesh	465	Fr 20	Feb	53	57	Agra	19	294	37
*544	45	19 -	601		466	Fr 11	Mar	54	58	Paush	20	295	37
545	<b>†</b> 46	19	602	Phâl	467	We 1	Mar	55	59	Mâgh	21	296	37
546	47	19 -	603		468	Mo 19	Mar	56	60	Phâl	22	297	38
547	48	19 -	604		469	Fr 8	Mar	57	62.1	Chait	23	298	38
•548	49	19 -	605	Srâv	470	We 26	Feb	58	2	Vais	24	299	38
549	50	19 -	606		471	Tu 16	Mar	59	3	Jyesh	25	300	38
550	3651	19 —	607	÷	479	Sa 5	Mar	60	4	Ashad	26	301	38
551	3652	19 Mar	608	Ashad	473	We 22	Feb	9, 1	Б	Srâv	27	302	38
*552	53	19 -	609		474	We 13	Mar	2	6	Bhåd	28	303	38
553	54	19 -	610		475		Mar	3	7	Aswa	29	304	38
554	55	19 -	611	Vais	476	Th 19	Feb	4	8	Kart	30	305	38
555	56	19 -	612		477	Tu 9	Mar	5	9	Agra	31	306	38
*556	57	19 -	613	Bhâd	478	S 27	Feb	6	10	Paush	32	307	39
557	58	19 -	614		479	Sa 17	Mar	7	11	Mågh	33	308	39
558	59	19 -	615		480	Th 7	Mar	8	12	Phål	34	309	39
559	60	19 -	616	Ashad	481	Mo 24	Feb	9	13	Chait	35	310	39
*560	3661	<sup>19</sup> — .	617		482	S 14	Mar	10	14	Vais	36	311	39
561	3662	19 Mar	618		483	Th 3	Mar	11	15	Jyesh	37	312	39
562	63	19 —	619	Jyesh	484	Fr 21	Feb	12	16	Ashad	38	313	39
563	61	19 —	620		485	S 11	Mar	13	17	Sråv	39	314	39
*564	<b>‡</b> 65	19	621	Aswa	486	Fr 29	Feb	14	18	Bhâd	40	315	39
565	66	19 —	622		487	Th 19	Mar	•16	19	• Kârt	41	316	39
566	67	19 —	623		488	Mo 8	Mar	17	20	Agra	42	317	40
567	68	19 —	624	Sråv	489	Fr 25	Feb	18	21	Paush	43	318	40
*568	69	19 —	625	-	490	Fr 16	Mar	19	22	Màgh	44	319	40
569	70	19 —	626		491	Tu 5	Mar	20	23	Phâl	45	320	40
570	3671	19 -	627	Jyesh	492	Fr 21	Feb	9.21	62.24	Chait	46	321	40

† Agrahayana omitted, and Kârtika intercalary.

‡ Pausha omitted, and Phâlguna intercalary.

	SOLAR	a-Yi	EAR.		LUNI-S	OLAR	YEA	R.		JUP	TER-C	YCLES.	1		
A.D.	Kali	In	itial	Vik	Intercal	Sak				60 Y	ears.	12	Rishi.	Sam.	a Kal.
A.D.	Yuga.		ay.	Sam	Month.	Sal.	Init	ial .	Day.	s. sid.	Tel.	Years.	Sapt. ]	Chedi Sam.	Haraha KAI.
631	3732	20	Mar	688		553	We	10	Mar	10.22	63.25	Vais	7	382	2
*632	33	20	_	689	Bhåd	554	Fr	28	Feb	23	26	Jyesh	8	383	26
633	34	20	1	690		555	We	17	Mar	24	27	Ashad	9	384	-
634	35	20	1	691		556	Mo	7	Mar	25	28	Srâv	10	385	2
635	36		_	692	Ashad	557	Fr	24	Feb	26	29	Bhåd	11	386	25
*636	37	20	-	693		558	Th	14	Mar	27	30	Aswa	12	387	3
637	38	20	_	694		559	Tu	4	Mar	28	31	Kârt	13	388	31
638	39	20	-	695	Vais	560	Sa	21	Feb	29	32	Agra	14	389	33
639	40	20	-	696		561	Th	11	Mar	30	33	Paush	15	390	33
*640	3741	20	3	697	Bhâd	562	Tu	29	Feb	31	34	Mâgh	16	391	34
641	3742	90	Mar	698		563	Мо	19	Mar	32	35	Phâl	17	392	35
612	43	20	-	199		564	0.00	- 77	Mar		36	Chait	18	393	
643	44	20	.0	700	Ashad	565			Feb	34	37	Vais	19	394	3
*614	45	20	2	701		566			Mar	35	38	Jyesh	20	395	3
615	46	20	_	702		567	Sa		Mar		39	Ashad	21	396	3
616	47	20	1	703	Jyesht	568	We	22	Feb	37	40	Sråv	22	397	4
647	48	20	-	704		569	Tu	13	Mar	38	41	Bhåd	23	398	4
*648	49	20	-	705	Kârt	570	s	2	Mar	39	42	Aswa	24	399	1
649	50	20	-	706		571	Fr	20	Mar	40	43	Kârt	25	400	4
650	3751	20	-	707		572	Tu	9	Mar	42	44	• Paush	26	401	4
651	3752	20	Mar	708	Srâv	573	s	27	Feb	43	45	Mâgh	27	402	4
*652	53	20	mar	709	Grav	1.00	Sat		Mar		46		28	403	
653	54	20	12	710		10.00	We		Mar	45	47	Chait	29	404	
654	55			711	Ashad	1000	Mo			46	48		30	405	1
635		20	-	712					Mar				31	406	
*656		20		713			Th		Mar				32	407	
657	58			714		1.1.1.1.1.1.1	Mo		Feb			1000	33	408	
658			_	715		580	1.00		Mar			1. Concerning 1	34	409	
659		20		716	- 70° C 201	1.1.1.1.1	Fr		Mar	1	1.1.1	the second se	35	410	
*660	3761			717		1.000	Th		Mar	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	63.54		36	(1)	

	SOLAT	2-Y1	CAR.	1	LUNI-S	OLAR	YEAR.		JUP	ITER-CY	CLES.			
A. D.	Kali	In	itial	Vik	Intercal	Sak			60 Y	ears.	12	tishi.	Sam	A Kål.
a, D.	Yuga.		ay.	Sam	Month.	Sal.	Initial	Day.	S. Sid.	Tel.	Years.	Sapt, Rishi.	Chedi Sam	Harsha
661	3762	20	Mar	718		583	Mo 8	Mar	10.53	63.55	Agra	37	412	55
662	63	20	_	719	Ashad	584	Fr 25	Feb	54	56	Paush	38	413	56
663	64	21	_	720		585	Fr 17	Mar	55	57	Mågh	39	414	57
*664	65	20	-	721		586	Tu 5	Mar	56	58	Phâl	40	415	55
665	66	20	-	722	Jyesh	587	Sa 23	Feb	57	59	Chait	41	416	55
666	67	20	-	723		588	Th 12		58	60	Vais	42	417	
667	68	21	_	724	Kårt	589	Tu 2	Mar	59	64.1	Jyesh	43	418	61
*668	69	20	-	725		590	Mo 20	Mar	60	2	Ashad	44	419	6:
669	70	20	_	726		591	Fr 9	Mar	11. 1	3	Sråv	45	420	65
670	3771	21	-	727	Sràv	592	We 27	Feb	2	4	Bhâd	46	421	64
671	3772	20	Mar	728		593	Mo 17	Mar	3	5	Aswa	47	422	61
*672	73	20		729		594	Sa 6		4	6	Kârt	48	423	6
673	74	20	-	730	Ashad	595	We 23	0.011	5	7	Agra	49	424	67
674	75	20	_	731		596	Tu 14	Mar	6	8	Pansh	50	425	68
675	76	21	-	732		597	S 4	Mar	7	9	Mågh	51	426	69
*676	77	20	_	733	Chait	598	Th 21		8	10	Phâl	52	427	70
677	78	20	_	734		599	We 11	10.00	9	i i	Chait	53	428	71
678	79	20	-	735	Bhåd	600	S 28		10	12	Vais	54	429	75
679	80	21	-	736		601		Mar	11	13	Jyesh	55	430	7:
*680	3781	20	4	737		602	Th 8		12	14	Ashad	56	431	74
681	3782	20	Mar	738	Ashad	603	Mo 25	Feb	13	15	Sråv	57	432	71
682	83	20	_	739		604	Sa 15		14	16	Bhâd	58	433	76
683	84	20	_	740		603	We 4		15	17	Aswa	59	434	77
*684	85	20	1	741	Jyesh	606	Tu 23		16	18	Kart	60	435	7
685	86	20	-	742		607	10 M	Mar	17	19	Agra	61	436	7
686	87	21	-	743	Aswa	608	Fr 2		18	20	Paush	62	437	8
687	88	21	_	744		609	Th 21		19	21	Mågh	63	438	8
*688	89	20	_	745		610	Mo 9		20	22	Phâl	64	439	8
689	90	20	-	746	Sráv	611	Fr 26		21	23	Chait	65	440	8
690	3791	21	1	747		612	Fr 18		11.22	64.24	Vais	66	441	8

	Solab-Yeab.				LUNI-S	OLAR	-Теа	JUP					
A. D.	Kali Initial		Vik Intercal			Initial Day.		60 Y	CAIS.	12	Itishi.		
	Yuga.	D	ay.	Sam	Month.	Sal	11116		•	s. sid.	Tel.	Years.	Sapt. 1
691	3792		Mar				Tu		Mar		64.25	-	67
*692	93			749	Ashad	614			Feb	24	26	Ashad	68 60
693	94			750	•••		Fr		Mar	25	27	Sråv Bhåd	69 70
694 697	93 00			751	 Chait		Tu		Mar	26 27	28 29	Aswa	70
695	96 97			752 753		617			Feb	24	29. 30.	Kârt	72
*696	98 98			165 754	 Bhâd	618	Sa. Wed		Mar	28. 29.	1	Agra	73
697 698	99 99			755			- Fr		r eo Mar	29 30	32	Paush	74
699	33 3800	i =-		756		620			Mar	31	33 33	Màgh	75
•700	3801	21		757	Ashad		We		Feb	32	34	Phâl	76
-100	3001	21		101	Aslieu	022	We	20	reo	ن <del>ر</del>	91	I Her	10
701	3802	01	Mar	758		693	Wed	16	Max	33	35	Chait	77
702	03	21	MAL	759		624	S		Mar	31	36	Vais	78
702	04	21	_	760		625		-	Feb	35	37	Jyesh	79
*704	05	20		761		626			Mar	36	38	Ashad	80
705	06	20	_	762		627			Mar	37		Srâv	81
706	07	21	_	763			Mo		Mar	38	40	Bhâd	82
707	08			764	1		Fr		Mar	39	41	Aswa	83
+708	09	1		765			Tu		Feb	40		Kârt	84
709	10	1		766			Tu		Mar	41		Адта	85
710	3811	21		767	••••	632	•		Mar	42	44	Paush	86
								·					
711	3812	21	Mar	768	Jyesh	633	Mo	23	Feb	43	45	Mâgh	87
+712	13			769			Tu		Mar	41		Phål	88
718	14			770			Mo		Mar	45		Chait	89
714	15			771	Chait		Tu		Feb	46	48.		90
715	16			772		637			Mar	47	49	Jyesh	91
+716	17			773	Srâv	638			Feb	48	50	Ashad	92
717		21		774			Fr		Mar	49	51	Srâv	93
718	19	,		775			Tu		Mar	50	52	Bhåd	94
719	20	1		776		641	Sa	25	Feb	51	53	Aswa	95
•720	3821	21		777	Ashad	642	Sa	16	Mar	11.52	64.54	Kârt	96
				1									
		L	_	L				-					L

General Table of Corresponding Dates.

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## General Table of Corresponding Dates.

A. D.       Kali Yuga.       Initi Day         721       3822       21 M         722       23       21 -         723       24       21 -         723       24       21 -         723       24       21 -         *724       26       21 -         725       26       21 -         726       27       28       21 -         727       28       21 -         729       30       21 -         730       3831       21 -         733       34       21 -         734       35       21 -         735       36       21 -         736       37       21 -         737       38       21 -         738       39       21 -         739       40       21 -         737       38       21 -         738       39       21 -         739       40       21 -         740       3841       21 -         743       44       21 -         743       44       21 -         745       46       21 - <td< th=""><th></th><th>LUNI-S</th><th></th><th>JUPI</th><th></th><th> </th><th></th></td<>		LUNI-S		JUPI								
722       23       21         723       24       21         723       24       21         *724       26       21         725       26       21         726       27       21         727       28       21         *728       29       21         *729       30       21         729       30       21         730       3831       21         733       34       21         734       36       21         735       36       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         *744       43       21         *744       45       21         *745       46       21         *744       45       21         *745       46       21         *744       45       21         *745       46       21         746       47       21         747       48       21 <th></th> <th>Vik Intercal Sam Month.</th> <th></th> <th colspan="2">Initial Day.</th> <th colspan="2">60 Years. S. Sid. Tel.</th> <th>12 Years.</th> <th>Supt. Rishi.</th> <th>Chedi Sum.</th> <th>Harsha Kâl.</th>		Vik Intercal Sam Month.		Initial Day.		60 Years. S. Sid. Tel.		12 Years.	Supt. Rishi.	Chedi Sum.	Harsha Kâl.	
722       23       21         723       24       21         723       24       21         *724       26       21         725       26       21         726       27       21         727       28       21         *728       29       21         *729       30       21         729       30       21         730       3831       21         733       34       21         734       35       21         735       36       21         736       37       21         737       38       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         *740       3841       21         *741       3842       21         *743       44       21         *744       45       21         *745       46       21         745       46       21         746       47       21         <		770	643	We	-	Mar	11 53	<b>64.</b> 55	Agra	97	472	115
723 $24$ $21$ $-$ *724 $25$ $21$ $-$ 725 $26$ $21$ $-$ 726 $27$ $21$ $-$ 727 $28$ $21$ $-$ 727 $28$ $21$ $-$ 727 $28$ $21$ $-$ 727 $28$ $21$ $-$ 729 $30$ $21$ $-$ 730 $3831$ $21$ $-$ 731 $3832$ $21$ $-$ 733 $34$ $21$ $-$ 733 $34$ $21$ $-$ 734 $36$ $21$ $-$ 735 $36$ $21$ $-$ 737 $38$ $21$ $-$ 738 $39$ $21$ $-$ 739 $40$ $21$ $-$ 741 $3842$ $21$ $-$ 743 $44$ $21$ $-$ 743 $44$ $21$ $-$		778 779 Vais	644	Sa		Feb	54		Paush	98	473	
$\bullet$ 724       26       21         725       26       21         726       27       21         727       28       21 $\bullet$ 728       29       21 $\bullet$ 729       30       21         730       3831       21         733       34       21         734       36       21         735       36       21         738       39       21         739       40       21         739       40       21         741       3842       21         741       3842       21         744       45       21         743       44       21         744       45       21         743       74       21		780	645			Mar		57	Mågh	99	471	117
725 $26$ $21$ $ 726$ $27$ $21$ $ 727$ $28$ $21$ $ 727$ $28$ $21$ $ 727$ $28$ $21$ $ 729$ $30$ $21$ $ 729$ $30$ $21$ $ 730$ $3831$ $21$ $ 733$ $34$ $21$ $ 733$ $34$ $21$ $ 734$ $36$ $21$ $ 735$ $36$ $21$ $ 736$ $37$ $21$ $ 737$ $38$ $21$ $ 738$ $39$ $21$ $ 739$ $40$ $21$ $ 741$ $3841$ $21$ $ 741$ $3842$ $21$ M $742$ $43$ $21$ $ 743$ $444$ $21$ $ 745$ $46$ <th></th> <th>781 Bhad</th> <th>616</th> <th></th> <th></th> <th>Mar</th> <th></th> <th></th> <th>Phâl</th> <th>100</th> <th>475</th> <th>118</th>		781 Bhad	616			Mar			Phâl	100	475	118
726       27       21       -         727       28       21       -         *728       29       21       -         729       30       21       -         730       3831       21       -         731       3832       21       -         733       384       21       -         733       34       21       -         734       36       21       -         735       36       21       -         736       37       21       -         737       38       21       -         738       39       21       -         739       40       21       -         *740       3841       21       -         741       3842       21       M         742       43       21       -         743       44       21       -         *744       45       21       -         *745       46       21       -         746       47       21       -         746       47       21       -		782	647	Tu		Mar			Chait	1	476	119
727       28       21         *728       29       21         729       30       21         730       3831       21         730       3831       21         731       3832       21         733       34       21         733       34       21         734       36       21         735       36       21         736       37       21         737       38       21         738       39       21         739       40       21         *740       3841       21         741       3842       21         743       44       21         *744       45       21         *745       46       21         *746       47       21         *747       48       21		783	648	Sa		Mar			Vais	2	477	120
*728 29 21 - 729 30 21 - 730 3831 21 - 730 3831 21 - 731 3832 21 M *732 33 21 - 733 34 21 - 733 34 21 - 735 36 21 - 735 36 21 - 736 37 21 - 737 38 21 - 738 39 21 - 738 39 21 - 739 40 21 - 740 3841 21 - 741 3842 21 M 742 43 21 - 743 44 21 - 744 45 21 - 745 46 21 - 746 47 21 - 747 48 21 -		784 Srâv	649	We		Feb	59	65. 1	Jyesh	3	478	121
729       30       21         730       3831       21         730       3831       21         731       3832       21         *732       33       21         733       34       21         733       34       21         734       36       21         *735       36       21         *736       37       21         *736       37       21         737       38       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         *740       3841       21         *741       3842       21         *743       44       21         *744       45       21         *745       46       21         *746       47       21         *746       47       21         *746       47       21         *746       47       21         *746       47       21         *746       47       21      <		785	650	We		Mar	60	2	Ashad	4	479	122
730       3831       21         731       3832       21         733       34       21         733       34       21         733       34       21         733       34       21         733       34       21         735       36       21         737       38       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         *741       3842       21         743       44       21         *744       45       21         *745       46       21         746       47       21         747       48       21		786	651	S		Mar		3	Srâv	5	480	123
*732       33       21         733       34       21         733       34       21         734       35       21         735       36       21         *736       37       21         *737       38       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         *740       3842       21         743       44       21         *743       44       21         *744       45       21         745       46       21         746       47       21         747       48       21	787	787 Jyesh	652	Th	23	Feb	2	4	Bhâd	6	481	124
*732       33       21         733       34       21         733       34       21         734       35       21         735       36       21         *736       37       21         *737       38       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         *740       3842       21         743       44       21         *743       44       21         *744       45       21         745       46       21         746       47       21         747       48       21												
*732       33       21         733       34       21         733       34       21         734       35       21         735       36       21         *736       37       21         *737       38       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         *740       3842       21         743       44       21         *743       44       21         *744       45       21         745       46       21         746       47       21         747       48       21	. 789	788	653	Fr	14	Mar	3	5	Aswa	7	482	125
733       34       21         734       36       21         735       36       21         736       37       21         *736       37       21         737       38       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         *740       3841       21         *740       3842       21         743       44       21         *743       44       21         *744       45       21         *745       46       21         745       46       21         746       47       21         747       48       21		789	654			Mar		6	Kârt	8	483	
734       36       21         735       36       21         735       36       21         *736       37       21         737       38       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         *740       3841       21         *740       3841       21         *743       44       21         743       44       21         *744       45       21         745       46       21         746       47       21         747       48       21		790 Chait	655			Feb		7	Agra	9	484	
735       36       21         *736       37       21         737       38       21         738       39       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         *740       3841       21         *741       3842       21         743       44       21         *744       45       21         *745       46       21         746       47       21         747       48       21		791	656			Mar	1	8	Paush	10	485	128
*736       37       21         737       38       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         *740       3842       21         741       3842       21         743       44       21         *744       45       21         *745       46       21         746       47       21         747       48       21		792 Srâv		Мо		Feb		9	• Phâl	11	486	129
737       38       21         738       39       21         739       40       21         *740       3841       21         *740       3841       21         741       3842       21         743       44       21         *744       45       21         *745       46       21         745       46       21         746       47       21         747       48       21		793	658			Mar		10	Chait	12	487	130
738       39       21         739       40       21         *740       3841       21         711       3842       21         741       3842       21         743       44       21         *744       45       21         *745       46       21         746       47       21         747       48       21		794	659		8	Mar	10	11	Vais	13	488	131
*740 3841 21 741 3842 21 M 742 43 21 743 44 21 *744 45 21 745 46 21 746 47 21 747 48 21	795	795 Ashad	660	Tu	25	Feb	11	12	Jyesh	14	489	132
741     3842     21 M       742     43     21       743     44     21       *744     45     21       745     46     21       746     47     21       747     48     21	796	796	661	Mo	16	Mar	12	13	Ashad	15	490	133
742     43     21       743     44     21       *744     45     21       *745     46     21       746     47     21       747     48     21	797	797	662	Fr	4	Mar	13	14	Srâv	16	491	134
742     43     21       743     44     21       *744     45     21       *745     46     21       746     47     21       747     48     21												
742     43     21       743     44     21       *744     45     21       *745     46     21       746     47     21       747     48     21	798	798, Vais	663	We	22	Feb	14	15	Bhâd	17	492	135
743     44     21       *744     45     21       745     46     21       746     47     21       747     48     21		799	664			Mar	1 1	16	Aswa	18	493	1
•744 45 21 745 46 21 746 47 21 747 48 21	1	800 Bhåd	665			Mar			Kârt	19	491	137
745         46         21         -           746         47         21         -           747         48         21         -		801	666			Mar	17	18	Agra	20	495	138
746 47 21 – 747 48 21 –		802	667			Mar		19	Paush	21	496	139
747 48 21 -		803 Srâv	668		26	Feb	19	20	Mâgh	2:	497	140
		804		Fr		Mar		21	Phâl	23		141
110 10 21 -		805		We		Mar		22	Chait	24	499	142
749 50 21 -		806 Jyesh	671			Feb		23	Vais	25	500	143
750 3851 21 -	807	807	672		14	Mar	<b>12</b> .23	65.24	Jycsh	26	501	144

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## Sowera Juvie of Corresponding Incom.

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Sant. Richt.	Tas.		si Te		Initia	Bak Ba	internal Monta	Vik : bum	itis. W	Jni Je	Kali Tugu	A D.
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13	1ndel.	鐵馬	1E.95	Har	We	100	÷	-	Mar	<u>m</u>	385.2	763
Ľ	Sei a	.26	25	Fet	Ms 2	11-1	Cinair	809	-	#1	£B	*712
Ľ	Binat	5	.96	Mar	5 3	€ī;∌	-	刮り	-	5	54	753
13	The star	25	57	Fei-	n :	1.6	Sein	₹22	-	21	55	754
Ľ	Lie	25	- 29	Mar	We 3	1	-	822	-	21	56	755
P	These .	311	24	E Mar	Mo	175	-	£2\$	-	27	12	*756
13	Pausit.	17	34	Tet	E 1	€.H	Ashaf	₹24	-	21	5분	757
H	Ritz	32	37	Mar	We :	680		F25	-	21	59	755
13	Phil	335	32	Mar	s	侍	-	£:6	-	21	-60	759
ľ	Chait	54	35	: Teš	Sa 2	68 <u>0</u>	Tais	E17	-	21	3661	*760
L	T <sub>sis</sub>	35	34	Mar	<b>T5</b> 7	C21		F16	War	41	3562	761
Ŀ	Jyesh	-	35	Mar		0.000	Bhid	1000			63	762
Ľ	Ashal		36	Mar			and a state of the	690			64	763
	Scar		1	Mar			_	823	_		65	*764
L	Rhad	39	35	Feb			Бейт		_	1.0	66	765
L	Aswa	40	29	Mar				823	_		67	766
L	Kart		40	6 Mar				824	_		1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	767
L	Agra		41	Feb					1	21	11.75	*768
Ľ	Paush		42	Mar				836	-		70	769
	Migh		43	Mar			÷	827	-	0.0	3871	110
L		1				1						
Ŀ	Phål	45	44	0 Feb	We 5	693	Chait	828	Mar.	21	3572	771
Ľ	Chait	46	45	1 Mar	We 1	694		829	-	21	73	•772
L	Vais	47	46	8 Feb	S 2	695	Sriv	-830	-	21	74	573
L	Jyesh	48	47	8 Mar	Fr 1	696	***	831	-	21	75	774
i.	Ashad	49	48	7 Mar	Tu	697		832	-	21	76	775
Ŀ	Sráv	50	49	5 Feb	S 2	698	Ashad	833	$\dot{-}$	21	77	*776
Ľ	Bhåd	51	50	5 Mar	Sa 1	699	***	834	-	21	78	777
Ŀ	Aswa	52	51	4 Mar	We	700		835	-	21	79	778
	Kårt	53	52	2 Feb	Mo 2	701	Vais	836	-	22	80	779
Р	Agra	65.54	12.53	2 Mar	S I	702		837	-	21	3881	*780

† Kårtiks omitted, and Kärtika intercalary. \$ Agrahayana omitted, and Aswina intere

	SOLAR	YEAR.		LUNI-S	OLAB	YE.	46.		JUP	TER-C	YCLES.			
A. D.	Kali	Initial	Vik	Intercal	Sak			Deer	60 Y	ears.	12	Sapt. Rishi.	Sam.	Harsha Kâl.
A. D.	Yuga.	Day.	Sam	Month.	Sal.	Init	aal .	Day.	S, Sid.	Tel,	Years.	Sapt.	Chedi Sam.	Harsh
781	3882	21 Mar	838	Bhâd	703	Th	1	Mar	12.54	65.55	Paush	57	532	17
782	83	21 -	839		704	We	20	Mar	55	56	Mâgh	58	533	17
783	84	22 -	840		705	S	9	Mar	56	57	Phâl	59	534	17
*784	85	21 -	841	Ashad	706	Th	26	Feb	57	58	Chait	60	535	17
785	86	21 -	842		707	Th	17	Mar	58	59	Vais	61	536	17
786	87	21 -	843		708	Mo	6	Mar	59	60	Jyesh	62	537	18
787	88	22 -	844	Jyesh	709	Sa	24	Feb	60	66. 1	Ashad	63	538	18
*788	89	21 -	845		710	Th	13	Mar	13. 1	2	Sråv	64	539	18
789	90	21 -	846		711	Th	3	Mar	2	3	Bhåd	65	540	18
790	3891	21 —	847		712	S	21	Mar	3	4	Aswa	66	541	18
791	3892	21 Mar	848		713	Th	10	Mar	4	5	Kärt	67	542	18
•792	93	22 -	849	1.5.57	714		29	Feb	5	6	Agra	68	543	18
793	94	21 -	850		715			Mar	6	7	Paush	69	544	18
794	95	22 -	851		716	1200		Mar	7	8	Mågh	70	545	18
795	96	22 -	852	Ashad	717	We	25	Feb	8	9	Phâl	71	546	18
*796	97	21 -	853	Astau	718	Tu		Mar	9	10	Chait	72	547	15
797	98	21 -	854		719		192	Mar	10	11	Vais	73	548	19
798	99	21 -	855	Vais	720	We	21	Feb	11	12	Jyesh	74	549	19
799	3900	22 -	856		721	Tu		Mar	12	13	Ashad	75	550	19
*800	3901	21 —	857	Bhåd	722	s	2	Mar	13	14	Srâv	76	551	19
801	3902	21 Mar	858		723	Sa	20	Mar	14	15	Bhâd	77	552	19
802	03	21 -	859		724	We		Mar	15	16	Aswa	78	553	19
803	04	22 -	860	Ashad	725	100.00	1.71	Feb	16	17	Kårt	79	554	19
*804	05	21 -	861		726	Sa		Mar	17	18	Agra	80	555	19
805	06	21 -	862		727	We		Mar	18	19	Paush	81	556	19
806	07	22 -	868	Jyesh	728	Mo	23	Feb	19	20	Mâgh	82	557	20
807	08	22 -	864		729	s		Mar	20	21	Phâl	83	558	20
*808	09	21 -	865	Aswa	730	Th		Mar	21	22	Chait	84	559	20
809	10	21 -	866		731	We	21	Mar	22	23	Vais	85	560	20
810	3911	22	867		732	1000	12	Mar	13.23	66.24	Jyesh	86	561	20

	SOLAB	R-YEA	AR,		LUNI-S	OLAR	-YEA	в.		JUP	ITER-CY	CLES.			
A. D.	Kali	Init		Vik	Intercal	Sak	T : 4		Day.	60 Y	ears.	12	Rishi.	Sam.	KAI.
	Yuga.	Da	.у.	Sam	Month.	Sal	Init	181	•	S. Sid.	Tel.	Years.	Sapt. Rishi.	Chedi Sam.	Harsha
811	3912	22 1	Mar	868	Srâv	733	Fr	28	Feb	<b>13</b> .24	<b>66</b> .25	Ashad	87	562	205
*812	13		-	869		734	Th		Mar	25	26	Srâv	88	563	206
813	14	21	-	870		735	Mo	-	Mar	26	27	Bhâd	89	564	207
814	15	21	-	871	Ashad	736	Fr	-	Feb	27	28	Aswa	90	565	208
815	16	22	-	872		737	Fr		Mar	28	29	Kârt	91	566	209
*816	17	22	-	873	•••	738	We	5	Mar	29	30	Agra	92	567	210
817	18	21	-	874	Vais	739	Sa		Feb	30	31	Paush	93	568	211
818	19	22	-	875		740	Sa	13	Mar	31	32	Mâgh	94	569	212
819	20	22	-	876	Bhâd	741	We	2	Mar	32	33	Phảl	95	570	213
*820	3921	21	-	877		742	Mo	19	Mar	34	34	Vais	96	571	214
														i	
821	3922	21 1	Mar	878		743	Sa	9	Mar	35	35	Jyesh	97	572	215
82 <b>2</b>	23	22	_	879	Ashad	744	Th	27	Feb	36	36	Ashad	98	573	216
823	24	22		880		745	Tu	17	Mar	37	37	Srâv	99	574	217
*821	25	21		881		746	Sa	5	Mar	38	38	Bhâd	100	575	218
825	26	21	-	882	Jyesh	747	Th	23	Feb	39	39	Aswa	1	576	219
826	27	22		883		748	We	14	Mar	40	40	Kârt	2	577	220
827	28	22	_	884	Ashad	749	s	3	Mar	41	41	Agra	3	578	221
*828	29	22	-	885		750	S	22	Mar	42	42	Paush	4	579	222
829	30	21	_	886		751	We	10	Mar	43	43	Mâgh	5	580	223
830	3931	22	-	887	Sráv	752	Mo	28	Feb	44	44	Phâl	6	581	224
													Ū		-1
831	3932	22 1	Mar	888		753	s	10	Mar	45	45	Chait	7	EOO	225
*832	33	22		889		754	Fr		Mar	45 46		Vais		582	
833	34	22	_	890	Ashad	755	Tu		Feb	40 47	46		` 8	583	226
834	35	22	-	891		756	Mo		Mar		47	Jyesh	9	584	
835	36	22		892		757	Fr		Mar	48	48	Ashad	10	585	228
*836	37	22	_	893	 Chait	758	rr We		маr Feb	49 50	49	Srâv	11	586	229
837	38	22	_	894	Chait	759	Mo		reb Mar	50	50	Bhâd	12		230
838	39	22	_	895		760	мо Fr			51 50	51	Aswa		588	231
839	<b>4</b> 0	22		896		760	Th		Mar Mar	52 52	52	Kârt	14		232
*840	3941	21		897	•••	761	Mo		Mar Mar	53 19 54	53	Agra	15	590	233
0.0	0011			051	•••	102	що	ð	Jiar	13.54	66.54	Paush	16	591	234
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# General Table of Corresponding Dates.

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	SOLAI	3-YEAR.		LUNI-Se	DLVR	YEA	B.		JUPI	тек-Сү	CLES.			
A. D.	Kali	Initial	Vik	Intercal	Sak	Init	ial	Day.	60 Y	ears.	12	Sapt. Rishi.	Sam.	a Kâl.
	Yuga.	Day.	Sam	Month.	Sal.				S. Sid.	Tel.	Years	Sapt.	Chedi Sam	Harsha
841	3942	22 Mar	898	Ashad	700	<b>G</b> .								
841 842	5942 43	22 mar 22 —	899 899	Ashad	764			Feb Mar	13.55	1	Mâgh Phâl	17 18	592 593	235 236
843	44	22	900		765			Mar	56 57	56 57	Chait	10	594	$\frac{230}{237}$
*844	45	21	901	Jyesh	766			Feb	58	58	Vais	20	595	237
845	46	22 —	902		767			Mar	59	59	Jyesh	20	1	239
846	47	22 —	903	Ashad	768	We		Mar	60	60	Ashad	22	597	240
847	48	22 —	904		769		-	Mar	14. 1	67. 1	Srâv	23		241
*848	49	21 —	905		770	Sa	10	Mar	2	2	Bhâd	24	599	242
849	50	22 —	906	Srâv	771			Feb	3	3	Aswa	25		243
850	3951	22 —	907		772			Mar	4	4	Kârt	26	601	244
851	3952	22 Mar	908		773	Sa	7	Mar	5	5	Agra	27	602	245
*852	53	21 —	909	Ashad	774	Th		Feb	6	6	Paush	28	603	
853	ō4	22 —	910		775	We		Mar	7	7	Mâgh	29	604	247
854	55	22 —	911		776	S	4	Mar		8	Phil ·	30	<b>6</b> 05	248
855	56	22 —	912	Chait	777	Fr		Feb	9	9	Chait	31	606	249
*856	57	21	913		1 1	We		Mar	10	10	Vais	32	607	250
857	58	22 —	914	Srâv	779	Мо	1	Mar	11	11	Jyesh	33	608	251
838	59	22 —	915		780	s	20	Mar	12	12	Ashad	34	609	252
859	60	22 —	916		781	Th	9	Mar	13	13	Srâv	35	610	253
<b>*860</b>	3961	22 —	917	Ashad	782	Tu	27	Feb	14	14	Bhâd	86	611	254
861	3962	22 Mar	918		783	Th	17	Mar	15	15	Aswa	37	612	255
862	63	22 —	919		784			Mar	16	16	Kûrt	38	613	256
863	64	22 —	<b>9</b> 20	Vais	785	Tu	23	Feb	17	17	Agra	39	614	257
*86 <b>1</b>	65	22 —	921		786	Tu	14	Mar	18	18	Paush	40	615	258
865	66	22 —	922	Bhâd	787			Mar	19	19	Mâgh	41	616	259
866	67	22 —	923		788	ТЪ	21	Mar	20	20	Phâl	42	617	260
867	68	22 —	924		789	Мо	10	Mar	21	21	Chait		618	261
<b>*</b> 868	69	22 —	925	Srâv	790	Sa	28	Feb	22	22	Vais	44	619	262
869	70	22 —	926		791	Fr	18	Mar	23	23	Jyesh	45	620	263
870	3971	22 —	927		792	Tu	7	Mar	14.24	67.24	Ashad	46	621	264
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# General Table of Corresponding Dates.

	SOLAR	YEAR.		LUNI-S	OLAB	YEA	<b>B</b> .		JUPI	TER-CI	CLES.			
A. D.	Kali	Initial	Vik	Intercal	Sak				60 Y	ears.	12	Rishi.	Sam.	Harsha Kal.
	Yuga.	Day.	Sam	Month.	Sal.	Init	121	Day.	S. Sid.	Tel.	Years.	Sapt.	Chedi Sam.	IIarsh
871	3972	22 Mar	928	Jyesh	793	Sa	24	Feb	14.25	67.25	Sråv	47	622	26
*872	73	22 -	929		794	Sa	15	Mar	26	26	Bhåd	48	623	26
873	74	22 -	930		795	We	4	Mar	27	27	Aswa	49	624	26
874	75	22 -	931	Chait	796	Mo	22	Feb	28	28	Kârt	50	625	26
875	76	22 -	932		797	Tu	12	Mar	29	29	Адта	51	626	269
*876	77	22 -	933	Srâv	798	Th	1	Mar	30	30	Paush	52	627	270
877	78	22 -	934		799	We	20	Mar	31	31	Mågh	53	628	271
878	79	22 -	935		800	s	9	Mar	32	32	Phât	54	629	272
879	80	22 -	936	Ashad	801	Th	26	Feb	33	33	Chait	55	630	273
•880	3981	22 —	937		802	We	16	Mar	34	34	Vais	56	631	274
881	3982	22 Mar	938		803	Mo	6	Mar	35	35	Jyesh	57	632	275
882	83	22 -	939	Vais	804	Fr	23	Feb	36	36	Ashad	58	633	276
883	84	22 -	940		805		13	Mar	37	37	Srâv	59	634	277
*884	85	22 -	941	Bhåd	806	Tu	3	Mar	38	38	Bhåd	60	635	278
885	86	22 -	942		807	s	21	Mar	39	39	Aswa	61	636	279
886	87	22 -	943		808	Th	10	Mar	40	40	Kârt	62	637	280
887	88	22 -	944	Srâv	809	Mo	27	Feb	41	41	Agra	63	638	281
*888	89	22 -	945		810	Mo	18	Mar	42	42	Paush	64	639	282
889	90	22 -	946		811	Fr	7	Mar	43	43	Mâgh	65	640	283
890	3991	22 —	947	Jyesh	812	Tu	24	Feb	44	44	Phâl	66	641	284
891	3992	22 Mar	948		813	Мо	15	Mar	45	45	Chait	67	642	285
•892	93	22 -	949	t	814	Sa	00	Mar	46	46	Vais	68	643	286
893	94	22 -	950	Chait	815		1.5	Feb	47	47	Jyesh	69	644	287
894	95	22 -	951		816	10.00		Mar	48	48	Ashad	70	645	288
895	96	22 -	952	Srâv	817		-	Mar	49	49	Sráv	71	646	289
*896	97	22 -	953		818			Mar	50	50	Bhâd	72	647	290
897	98	22 -	954		819		9	Mar	51	51	Aswa	73	648	291
898	99	22 -	955	Ashad	820			Feb	52	52	Kårt	74	649	292
899	4000	23 -	956		821	Sa		Mar	53	53	Agra	75	650	293
*900	4001	23 -	957		822	We	6	Mar	14.54	67.54	Paush	76	651	294

† Kårtika omitted, and Kårtika intercalary.

# General Table of Corresponding Dates.

	SOLAR	-YEAR.		LUNI-S	OLAR	-YE	R.		JUPI	TER-C	TCLES.			
A. D.	Kali	Initial	Vik	Intercal	Sak				60 Y	ears.	12	Rishi.	Sam.	a Kâl.
	Yuga.	Day.	Sam	Month.	Sal.	Init	al	Day.	S. Sid.	Tel.	Years.	Sapt. Rishi.	Chedi Sam.	Harsha
901	4002	22 Mar	958	Vais	823	s	22	Feb	14.55	67.55	Mâgh	77	652	298
902	03	23 —	959		824	s	14	Mar	56	56	Phál	78	653	290
903	04	23 -	960	Bhåd	825	Th	3	Mar	57	57	Chait	79	654	297
*904	05	22 -	961		826	We	21	Mar	58	58	Vais	80	655	298
905	06	22 -	962		827	S	10	Mar	• 60	59	Ashad	81	656	299
906	07	23 —	963	Srâv	828	Fr	28	Feb	15. 1	60	Srâv	82	657	300
907	08	23 -	964		829	Th	19	Mar	2	68. 1	Bhåd	83	658	30)
*908	09	22 -	965		830	Mo	7	Mar	3	2	Aswa	84	659	302
909	10	22 -	966	Jyesh	831	Fr	24	Feb	4	3	Kârt	85	660	303
910	4011	23 —	967		832	Th	15	Mar	5	4	Agra	86	661	304
911	4012	23 Mar	968	t	833	Tu	5	Mar	6	5	Paush	87	662	305
*912	13	22 -	969	Chait	834	S		Feb	7	. 6	Mâgh	88	663	306
913	14	23 -	970		835	Sa		Mar	8	7	Phâl	89	664	301
914	15	22 -	971	Srâv	836	Tu	1	Mar	9	8	Chait	90	665	308
915	16	23 -	972		837	Mo	20	Mar	10	9	Vais	91	666	309
*916	17	22 -	973		838	Fr		Mar	n	10	Jyesh	92	667	310
917	18	22 -	974	Ashad	839	Tu	25	Feb	12	11	Ashad	93	668	311
918	19	22 -	975		840	Mo	16	Mar	13	12	Srâv	94	669	315
919	20	23 -	976		841	Sa	6	Mar	14	13	Bhâd	95	670	315
*920	4021	<u>22</u> —	977	Vais	842	We	23	Feb	15	14	Aswa	96	671	314
921	4022	22 Mar	978		843	Tu	13	Mar	16	15	Kårt	97	672	314
922	23	22 -	979	Bhâd	844	Sa		Mar	17	16	Agra	98	673	316
923	24	23 -	980		845	Sa	22	Mar	18	17	Paush	99	674	311
*924	25	22 -	981		846	We	10	Mar	19	18	Mâgh	100	675	318
925	26	22 -	982	Ashad	847	s	27	Feb	20	19	Phâl	1	676	319
926	27	22 -	983		848	Sa	18	Mar	21	20	Chait	2	677	320
927	28	23 -	984		849	Th	8	Mar	22	21	Vais	3	678	32
*928	29	22 -	985	Jyesh	850	Mo	25	Feb	23	22	Jyesh	4	679	32
929	30	22 -	986		851	Sa	14	Mar	24	23	Ashad	5	680	32
930	4031	22 -	987	Aswa	852	Th	4	Mar	15.25	68.24	Srâv	6	681	324

† Agrahayana omitted, and Aswina intercalary.

#### GENERAL TABLE OF CORRESPONDING DATES.

#### TABLE XVII.-(Continued.)

#### SOLAR-YEAR LUNI-SOLAR-YEAR. JUPITER-CYCLES. Jedi Sam. Haraha F Hapt. Rinhi. 60 Years. Kali Initial Vik Intercal Sak Initial Day. Fuga Day. Sam Month. Sal. 12 **A**. D. Years Yuga. S. Sid. Tel. I 931 4032 23 Mar. 955 853 We 23 Mar 15.26 68.25 Bhid 7 682 323 854 Mo 12 Mar 8 683 326 \*932 33 23 989 27 26 Aswa ----9 684 933 34 22 990 Sråv 855 Fr 1 Mar 28 27 Kårt 327 10 685 328 35 23 20 Mar 934 991 856 Th 28 Agra ----29 11 686 36 23 329 935 992 857 Mo 9 Mar Paush \_ 30 29 12 687 330 \*936 37 23 858 Sa 27 Feb Mågh 993 Ashad 30 \_ 31 38 22 937 994 859 Th 16 Mar 32 31 Phal 13 688 331 ---938 39 23 995-860 Tu 6 Mar 32 Chait 14 689 332 33 40 23 690 333 939 23 Feb Vais 15 996 Vais 861 Se 34 33 4041 22 862 Fr 16 691 334 \*940 997 13 Mar Jyesh 35. 34 ... 17 692 335 941 4042 22 Mar. 35 Ashad 998 Bhad 863 Tu 9 War 36 18 693 336 43 23 864 Mo 21 Mar Sriv 942 \_\_\_\_ 999 37 36 ... 19 694 943 44 23 1000 865 Fr 10 Mar Bhad 337 38 37 ... 20 695 \*944 338 45 22 \_ 1001 Ashad 866 We 28 Feb 39 38 Aswa 21 696 339 46 23 1002 Kirt 945 867 Tu 18 Mar 39 \_\_\_\_ 40 22 697 340 946 47 23 1003 868 S 7 Mar Agra 41 40 ... 23 698 341 947 1004 Jyesh 869 We 24 Feb Paush 48 23 \_ 42 41 24 699 342 \*948 49 22 1005 870 Mo 14 Mar 42 Migh 43 ... 25 700 34: 1006 Phál 949 50 22 \_\_\_ Aswa 871 Sa 3 Mar 44 · 43 Chait 26 701 344 950 4051 23 1007 872 Sa 23 Mar 45 44 951 4052 23 Mar. 1008 27 702 345 873 We 12 Mar Vais 45 ... 46 28 703 346 \*952 53 22 1009 Sráv 874 S 29 Feb Jyesh 47 46 29 704 347 1010 19 Mar 953 54 22 875 Sa 48 47 Ashad ... 30 705 348 9 Mar 1011 876 Th Sriv 954 55 23 49 48 ... 31 706 349 955 56 23 1012 **Jyesh** 877 Mo 26 Feb Bhâd 50 49<sup>|</sup> \_ 32 707 350 \*956 57 22 1013 878 8 16 Mar 51 50 Aswa -••• 33 708 351 957 58 22 1014 879 Th 5 Mar Kart 52 51 ... 34 709 353 958 1015 Vais 880, Tu 23 Feb Agra 59 23 53 52 881 Mo 35 710 353 1016 959 60 23 14 Mar 54 53 Paush 36 711 354 \*960 1017 Bhád 2 Mar 4061 22 882 Fr 15.55 68.54 Màgh 1

#### General Table of Corresponding Dates.

168

## GENERAL TABLE OF CORRESPONDING DATES.

## TABLE XVII.-(Continued.)

# General Table of Corresponding Dates.

	SOLAR	·YI	CAR.	1	LUNI-S	OLAR	-YEA	R.		JUPI	TER-CY	CLES.			
A. D.	Kali	Ini	itial	Vik	Intercal		Init	inl	Day.	60 Y	ears.	12	Sapt. Rishi.	Chedi Sam.	a Kal.
	Yuga.	D	ay.	Sam	Month.	Sal.		_		S. Sid.	Tel.	Years.	Sapt.	Chedi	Harsha
961	4062	23	Mar	1018		883	Th	21	Mar	15.56	68.55	Phâl	37	712	35
962	63	23	-	1019		884	Mo	10	Mar	57	56	Chait	38	713	35
963	64	23	-	1020	Ashad	885	Fr	27	Feb	58	57	Vais	39	714	30
•964	65	22	_	1021		886	Th	17	Mar	59	58	Jyesh	40	715	31
965	66	23	_	1022		887	Tu	7	Mar	60	59	Ashad	41	716	34
966	67	23	-	1023	Jyesh	888	Sa	24	Feb	16. 1	60	Srâv	42	717	3
967	68	23	1	1024		889	Fr	15	Mar	2	69. 1	Bhåd	43	718	3
*968	69	22	-	1025	Aswa	890	Tu	3	Mar	3	2	Aswa	44	719	3
969	70	23	-	1026		891	Tu	23	Mar	4	3	Kârt	45	720	3
970	4071	23	-	1027		892	Sa	12	Mar	5	4	Agra	46	721	3(
971	4072	23	Mar	1028	Srâv	893	We	1	Mar	6	5	Paush	47	722	3
*972	73	22	-	1029		894	Tu	19	Mar	7	6	Mågh	48	723	3
973	74	23	1	1030		895	s	9	Mar	8	7	Phál	49	724	3
974	75	23	-	1031	Jyesh	896	Mo	26	Feb	9	8	Chait	50	725	3
975	76	23	_	1032		897	Tu	16	Mar	10	9	Vais	51	726	3
*976	77	22	_	1033		898	S	5	Mar	11	10	Jyesh	52	727	3
977	78	23	-	1034	Chait	899	Fr	23	Feb	12	11	Ashad	53	728	3
978	79	23	-	1035		900	We	13	Mar	13	12	Sråv	51	729	3
979	80	23	-	1036	Bhâd	901	S	2	Mar	14	13	Bhåd	55	730	3
•980	4081	22	T	1037	-	902	Sa	20	Mar	15	14	Aswa	56	731	3
981	4082	23	Mar	1038		903	Th	10	Mar	16	15	Kårt	57	732	3
982	83	23	-	1039	Ashad	904	Mo	27	Feb	17	16	Agra	58	733	3
983	84	23	_	1040		905	s	18	Mar	18	17	Paush	59	734	3
*984	85	23	-	1041		906	Th	6	Mar	19	18	Mågh	60	735	3
985	86	23	-	1042	Jyesh	907	Tu	24	Feb	20	19	Phâl	61	736	3
986	87	23	-	1043		908	Mo	15	Mar	21	20	Chait	62	737	3
987	88	23	-	1044	Aswa	909	Fr	4	Mar	22	21	Vais	63	738	3
*988	89	23	-	1045	***	910	Th	22	Mar	23	22	Jyesh	64	739	3
989	90	23	-	1046		911	Tu	12	Mar	16.24	23	Ashad	65	740	3
990	4091	23	-	1047	Sriv	912	Sa	1	Mar	●26	69.24	• Bhad	66	741	3

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	Solai	R-YI	CAB.		LUNI-S	OLAB	-Ye	AB.		JUP	ITEB-C	YCLES,	
<b>▲</b> . D.	Kali		itial		Intercal		Ini	tial	Day.	60 Y	ears.	12	Rishi.
	Yuga.	D	ау.	Sam	Month	Sal.			Duj.	8. Sid.	Tel.	Years.	Sapt.
991	4092			1048	•••	913			Mar		<b>69</b> .25	Aswa	67
*992 993	93 94	23 23		1049		914	Tu	8	Mar	28 29	26 27	Kârt	68
995 994	94 95	23 23		1050 1051	Jyesh	915 916			Feb Mar	29 80	27 28	Agr <b>a</b> Paush	69 70
995	96	23 23		1051	•••	916 917	rr We		Mar	31	28 29	Pausn Mâgh	70 71
*996	97	23 23		1052	 Chait	917 918	Mo	-	Feb	32	25 30	Magn Phâl	72
997	98	23		1055	Chait	919	Sa		Mar	33	31	Chait	73
998	99	23		1055	 Srâv	920	We		Mar	34	82	Vais	74
999	4100	23		1056		921	Tu		Mar	35	83	Jyesh	75
<b>*</b> 1000	4101	23		1057	•••	922	S	10	Mar	36	34	Ashad	76
					•••	022	-				01	21011010	
			•										
1001	4102	23	Mar	1058	Ashad	923	We	26	Feb	37	35	Srâv	77
1002	03	23		1059		924	We	18	Mar	38	86	Bhâd	78
1003	04	23	_	1060		925	s	7	Mar	39	37	Aswa	79
<b>+100</b>	05	23		1061	Vais	926	Fr	25	Feb	40	38	Kârt	80
1005	06	23	-	1062		927	ТЪ	15	Mar	41	89	Agra	81
1006	07	23	_	1063	Bhåd	928	Mo	4	Mar	42	40	Paush	82
1007	08	23	-	1064		929	Sa	22	Mar	43	41	Mâgh	83
<b>*</b> 1008	09	28	-	1065		930	Th	11	Mar	44	42	Phâl	84
1009	10	23	_	1066	Sråv	931	Mo	28	Feb	45	43	Chait	85
1010	4111	23	-	1067	•••	932	S	19	Mar	46	44	Vais	86
1011	4112	23	Mar	1068	•••	933	Th	8	Mar	47	45	Jyesh	87
*1012	13	23	-	1069	Jyesh	934	Tu	26	Feb	48	46	Ashad	88
1013	14	23	-	1070	•••	935	Mo	16	Mar	49	47	Sråv	89
1014	15		-	1071	•••	936	-	Б	Mar	50	48	Bhåd	90
1015	16	23	-	1072	Chait	937	Th	2 <b>4</b>	Feb	51	49	Aswa	91
*1016	17	23		1073					Mar	52	50	Kârt	92
1017	18			1074	Srâ v	939			Mar	53	51	Agra	93
1018	19		-	1075	•••		Fr			54	52	Paush	94
1019	20			1076		941		10		55	53	Mâgh	95
<b>*</b> 1020	4121	23	-	1077	Ashad	942	ន	28	Feb	<b>16</b> .56	<b>69</b> .õ4	Phâl	96

## GENERAL TABLE OF CORRESPONDING DATES.

## TABLE XVII.-(Continued.)

	SOLAR	-Y1	ZAR,		LUNI-S	OLAR	-Үелв.		JUPP	TER-CY	CLES.	hi.	i	Kal.
1.1	Kali	In	itial	Vik	Intercal	Sak	T-111-1 T		60 Y	ears.	12	t. Rishi.	Chedi Sam.	Harsha K
<b>▲</b> . <b>D</b> .	Yuga.		ay.	Sam	Month.	Sal.	Initial D	ay.	S. Sid	Tel.	Years.	Sapt.	Chec	Har
1021	4122	23	Mar	1078		943	Fr 17 1	Iar	16.57	69.55	Chait	97	772	414
1022	23	23	1	1079		944	We 7 1	Iar	58	- 56	Vais	98	773	410
1023	24	24	-	1080	Vais	945	S 24 1	Feb	59	57	Jyesh	99	774	41
*1024	25	23	-	1081		946	Sa 14 M	Iar	60	58	Ashad	100	775	41
1025	26	23	-	1082	Bhad	947	We 3 1	Iar	17.1	59	Sråv	1	776	41
1026	27	23	-	1083		948	Tu 22 M	Iar	2	60	Bhâd	2	777	42
1027	28	24	-	1084		949	S 12 M	lar	3	70.1	Aswa	3	778	42
•1028	29	23	1	1085	Srâv	950	Th 29 ]	Feb	4	2	Kårt	4	779	42
1029	30	23	1	1086		951	We 19	Mar	5	3	Agra	5	780	42
1030	4131	23	-	1087		952	S 81	Iar	6	4	Paush	6	781	42
1031	4132	24	Mar	1088	Jyesh	953	Fr 26 H	reb	7	Б	Màgh	7	782	42
*1032	33	23	-	1089		954	Th 16 M	Iar	8	6	Phâl	8	783	42
1033	34	23	-	1090		955	Mo . 5 1	Iar	9	7	Chait	9	784	42
1034	35	23	-	1091	Chait	956	Fr 22 1	Feb	10	8	Vais	10	785	42
1035	36	24	-	1092		957	Th 13 M	Iar	11	9	Jyesh	11	786	42
*1036	37	23	-	1093	Srâv	958	Tu 2 D	far	12	10	Ashad	12	787	43
1037	38	24	-	1094		959	Mo 21 M	Iar	13	11	Sráv	13	788	43
1038	39	24	-	1095		960	Fr 10 M	Iar	14	12	Bhâd	14	789	43
1039	40	24	-	1096	Ashad	961	Tu 27 1	Feb	15	13	Aswa	15	790	43
*1040	4141	23	-	1097		962	S 17 M	far	16	14	Kârt	16	791	43
1041	4142	24	Mar	1098		963	Sa 7 M	far	17	15	Agra	17	792	43
1042	43	24		1099	Vais	964	We 24	Feb	18	16	Paush	18	793	43
1043	44	24	-	1100		965	Tu 15 1		19	17	Magh	19	794	43
•1044	45	23	-	1101	Bhâd	966	Sa 3 1	far	20	18	Phál	20	795	43
1045	46	23	-	1102		967	Fr 22 1	far	21	19	Chait	21	796	43
1046	47	24	-	1103		968	We 12 1	Iar	22	20	Vais	22	797	44
1047	48	24	-	1104	Srâv	969	S 11	Iar	23	21	Jyesh	23	798	44
•1048	49	23	-	1105		970	Sa 19 1	far	24	22	Ashad	24	799	44
1049	50	24	-	1106		971	Th 9 M	Iar	25	23	Sråv	25	800	44
1050	4151	24	1	1107	Jyesh	972	Mo 26 1	Feb	17.26	70.24	Bhåd	26	801	44

# General Table of Corresponding Dates.

	SOLAR	-YI	EAR.		LUNI-Se	DLAR	YEA	R.	714	JUPT	TER-CY	CLES.			
A. D.	Kali	In	itial	Vik	Intercal	Sak				60 Y	ears.	12	Rishi.	Sam.	a Kal.
A, D.	Yuga.		ay,	Sam	Month.	Sal.	Ini	tial	Day.	s. sid.	Tel.	Years.	Sapt. I	Chedi Sam.	Harsha Kål.
1051	4152	24	Mar	1108		973	s	17	Mar	17.27	70.25	Aswa	27	802	44
*1052	<b>†53</b>	23	-	1109		974	Th	5	Mar	28	26	Kârt	28	803	44
1053	54	23	-	1110	Chait	975	Mo	22	Feb	29	27	Agra	29	804	44
1054	55	24	-	1111		976	s	13	Mar	30	28	Paush	30	805	44
1055	56	24	-	1112	Srav	977	Th	2	Mar	31	29	Mågh	31	806	44
*1056	57	23	-	1113		978	We	20	Mar	32	30	Phâl	32	807	45
1057	58	23	-	1114		979	s	9	Mar	33	31	Chait	33	808	48
1058	59	24		1115	Jyesh	980	Fr	27	Feb	34	32	Vais	34	809	45
1059	60	24	-	1116		981	Th	18	Mar	35	33	Jyesh	35	810	40
*1060	4161	23	-	1117		982	Мо	6	Mar	36	34	Ashad	36	811	45
1061	4162	24	Mar	1118	Vais	983	Sa	24	Feb	37	35	Srâv	37	812	45
1062	63	24	4	1119		984	Fr	15	Mar	38	36	Bhåd	38	813	43
1063	64	24	1	1120	Bhad	985	Tu	4	Mar	39	37	Aswa	39	814	4
*1064	65	23	-	1121		986	Mo	22	Mar	40	38	Kårt	40	815	41
1065	66	23	-	1122		987	Fr	11	Mar	41	39	Agra	41	816	41
1066	67	24	-	1123	Ashad	988	We	1	Mar	42	40	Paush	42	817	4
1067	68	24	-	1124		989	Mo	19	Mar	43	41	Mågh	43	818	46
*1068	69	23	-	1125		990	Fr	8	Mar	44	42	Phâl	44	819	46
1069	70	24	-	1126	Jyesh	991	Th	26	Feb	45	43	Chait	45	820	40
1070	4171	24	-	1127		992	Tu	16	Mar	46	44		46	821	40
1071	4172	24	Mar	1128	Aswa	993	Sa	5	Mar	47	45	Jyesh	47	822	46
•1072	73	23	-	1129		994	Fr	23	Mar	48	46	Ashad	48	823	40
1073	74	24	_	1130		995	We	13	Mar	49	47	Sråv	49	824	41
1074	75	24	-	1131	Srâv	996	s	2	Mar	50	48	Bhâd	50	825	46
1075	76	24	-	1132		997	Sa	21	Mar	• 52	49	• Kart	51	826	
*1076	77	23	-	1133		998	We	9	Mar	53	50	Agra	52	827	4
1077	78	24	-	1134	Jyesh	999	Mo	27	Feb	54	51	Paush	53	828	4
1078	79	24	-	1135		1000	S	18	Mar	55	52	Mâgh	54	829	4
1079	80	21	-	1136		1001	Th	7	Mar	56	53	Phâl	55	830	4
*1080	4181	23	1	1137	Vais	1002	Mo	24	Feb	17.57	70.54	Chait	56	831	4

† Agrahayana omitted, and Aswina intercalary.

#### SOLAR-YEAR. LUNI-SOLAR-YEAR. JUPITEB-CYCLES. Harsha Kâl Rishi. Sam. 60 Years. Vik Intercal Sak Kali Initial **A**. **D**. Initial Day. Chedi f Sam Month. Sal. Years. Sapt. ] Yuga. Day. S. Sid. Tel. 24 Mar 1138 Mo 15 Mar 17.58 70.55 Vais ... Bhâd Fr 4 Mar Jyesh We 22 Mar Ashad ... \*1084 Srâv Mo 11 Mar 18·1 ••• Bhåd Ashad Fr 28 Feb Th 19 Mar Aswa ... Mo 8 Mar Kårt ... 71. \*1088 1010 Sa 26 Feb Jyesh Agra Fr 16 Mar Paush ----••• 1012 Tu 5 Mar Mâgh Aswa \_ 842 485 1013 Mo 24 Mar Phâl 24 Mar 1148 ••• \*1092 Chait Sa 13 Mar ... Vais 1015 We 2 Mar Srâv 1016 Tu 21 Mar Jyesh ... Sa 10 Mar Ashad ... **\***1096 Srâv 1018 Th 28 Feb \_ Jyesh We 18 Mar Bhâd ... Aswa s 7 Mar ... Kârt Th 24 Feb Vais **\*1100** 1022 We 14 Mar Agra ----... Mar 1158 Bhâd 1023 8 3 Mar Paush 1024 Sa 22 Mar Mâgh ••• Phâl 1025 We 11 Mar ----... **+**1101 1026 Mo 29 Feb Chait Ashad \_ Vais S 19 Mar ... Jyesh Th 8 Mar \_ ... Ashad Jyesh Mo 25 Feb Mo 16 Mar **•**1108 $\mathbf{22}$ Srâv ... Fr 5 Mar Bhåd Aswa Th 24 Mar 18.27 71.24 Aswa ...

#### TABLE XVII.-(Continued.) 1 ~ 11 .....

General	Table	of	Corresponding	Dates.
General	1 4010	IJ	corresponding	Duces

	SOLAI	-Yr	CAR.	1.1	LUNI-S	OLAR	YE	AR.		JUPI	TER-CY	CLES.			
A.D.	Kali	Ini	itial	Vik	Intercal	Sak				60 Ye	ars.	12	Rishi.	Sam.	Harsha Kal.
	Yuga.		ay.	Sam	Month.	Sal.	Init	al	Day.	S. Sid.	Tel.	Years.	Sapt. Rishi.	Chedi Sam	Harsh
1111	4212	24	Mar	1168		1033	Mo	13	Mar	18.28	71.25	Kårt	87	862	50
*1112	13	24	-	1169	Srâv	1034	We	2	Mar	29	26	Agra	88	863	50
1113	14	24	-	1170		1035	Th	20	Mar	30	27	Paush	89	864	50
1114	15	24	-	1171		1036	Tu	10	Mar	31	28	Mågh	90	865	50
1115	16	24	-	1172	Jyesh	1037	Sa	27	Feb	32	29	Phàl	91	866	50
*1116	17	24	-	1173		1038	Fr	17	Mar	33	30	Chait	92	867	51
1117	18	24	-	1174		1039	Tu	6	Mar	34	1	Vais	93	868	51
1118	19	24	-	1175	Chait	1040	Sa	23	Feb	35	2	Jyesh	94	869	5
1119	20	24	-	1176		1041	Fr	14	Mar	36	3	Ashad	95	870	5
*1120	4221	24	-	1177	Bhåd	1042	We	3	Mar	37	4	Sråv	96	871	5
1121	4222	24	Mar	1178		1043	Tu	22	Mar	38	5	Bhâd	97	872	5
1122	23	24		1179		12990	1.2.2		Mar	39	6	Aswa	98	873	
1123	24	24	-	1180		192.0	1		Feb	40	7	Kârt	99	874	5
*1124	25	24	-	1181		1046	We	19	Mar	41	8	Agra	100	875	5
1125	26	24	-	1182		1047	s	8	Mar	42	9	Paush	1	876	5
1126	27	24	-	1183	Jyesh	1048	Th	25	Feb	43	0	Mâgh	2	877	5
1127	28	24	-	1184		1049	We	16	Mar	44	1	Phål	3	878	5
*1128	29	24	-	1185	Aswa	1050	Mo	5	Mar	45	2	Chait	4	879	5
1129	30	24	-	1186		1051	S	23	Mar	46	3	Vais	5	880	5
1130	4231	24	-	1187		1052	Th	13	Mar	47	4	Jyesh	6	881	5
1131	4232	24	Mar	1188	Ashad	1053	Mo	2	Mar	48	5	Ashad	7	882	5
*1132	33	1.66		1189		1054	1.1		Mar		6	Srâv	8	1000	
1133	34	24		1190		1055	-		Mar		7	Bhâd	9	10.00	
1134	35	24	-	1191	Jyesh	1056	Mo	26	Feb	51	8	Aswa	10	885	ő
1135	36	25	-	1192		1.000	10.00		Mar	52	9	Kàrt	11	886	5
*1136	37			1193		1058	1		Mar		50	Agra		887	
1137	38	1.00		1194	1	1	1.5.5	23	Feb		1	Paush		888	
1138	39	24	-	1195		1060	Th	14	Mar	55	2	Mågh		889	
1139	40	24	-	1196	10.000	1061	1.000		Mar		3	Phâl		890	
*1140	4241	24	-	1197		1062	Fr		Mar		71.4	Chait		891	

#### GENERAL TABLE OF CORRESPONDING DATES.

## TABLE XVII.-(Continued.)

1	SOLAR	-YF	AB.	10	LUNI-S	OLAR	YEA	R.		JUPI	TER-C	TCLES.			
A. D.	Kali		itial	Vik.			Init	iol 1	Day.	60 Y	ears.	12	Sapt. Rishi.	Chedi Sam.	Harsha Kål.
	Yuga,	D	ay.	Sam	Month.	Sal.	Int	Let .	Day.	S. Sid.	Tel.	Years.	Sapt.	Ched	Hars
1141	4242	24	Mar	1198		1063	Tu	13	Mar	18.58	71.55	Vais	17	892	531
3142	43	24	-	1199	Ashad	1064	Sa	28	Feb	59	56	Jyesh	18	893	536
1143	44	25	-	1200		1065	Fr	19	Mar	60	57	Ashad	19	894	53
*1144	45	24	-	1201		1066	We	8	Mar	19. 1	58	Srâv	20	895	538
1145	46	24	_	1202	Vais	1067	S	25	Feb	2	59	Bhåd	21	896	539
1146	47	25	-	1203		1068	Sa	16	Mar	3	60	Aswa	22	897	540
1147	48	25	_	1204	Bhâd	1069	We	5	Mar	4	72. 1	Kart	23	898	54)
*1148	49	24	-	1205		1070	Tu	23	Mar	5	2	Agra	24	899	545
1149	50	24	-	1206		1071	Sa	12	Mar	6	3	Paush	25	900	543
1150	4251	24	-	1207	Ashad	1072	We	1	Mar	7	4	Mâgh	26	901	54
1151	4252	25	Mar	1208		1073	We	21	Mar	8	5	Phâl	27	902	540
*1152	53	24	_	1209	1	1074	S		Mar	9	6	Chait	28	903	540
1153	54	24	1	1210	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	1075	Th	26	Feb	10	7	Vais	29	904	547
1154	55	24	-	1211		1076	We	17	Mar	11	8	Jyesh	30	905	548
1155	56	25	-	1212		1077	Mo	7	Mar	12	9	Ashad	31	906	549
*1156	57	24	-	1213	Chait	1078	Fr	24	Feb	13	10	Sråv	32	907	550
1157	58	24	-	1214		1079	Th	14	Mar	14	11	Bhåd	33	908	551
1158	59	24		1215	Sråv	1080	Mo	3	Mar	15	12	Aswa	34	909	55
1159	60	25	_	1216		1081	s	22	Mar	16	13	Kârt	35	910	553
•1160	4261	24	-	1217		1082	Fr	11	Mar	•18	14	• Paush	36	911	554
1161	4262	24	Mar	1218	Ashad	1083	Tu	28	Feb	19	15	Mâgh	37	912	550
1162	63	25	_	1219		1084	Mo	19	Mar		16	Phål	38	913	55(
1163	64	25	-	1220		1085	Fr	8	Mar	21	17	Chait	39	914	551
*1164	65	24	-	1221	Vais	1086	We	26	Feb	22	18	Vais	40	915	558
1165	66	24	-	1222		1087	Mo	15	Mar	23	19	Jyesh	41	916	559
1166	67	25	4	1223	Bhåd	1088	Sa	5	Mar	24	20	Ashad	42	917	560
1167	68	25	_	1224		1089	Fr	24	Mar	25	21	Sråv	43	918	56)
*1168	69	24	-	1225		1090	Tu	12	Mar	26	22	Bhåd	44	919	565
1169	70	24	-	1226	Sråv	1091	Sa	1	Mar	27	23	Aswa	45	920	56
1170	4271	25	-	1227		1092	Sa	21	Mar	19.28	72.24	Kårt	46	921	56

	SOLAR	-YEAR.		LUNI-S	OLAB	YEAR.	6	JUP	TEB-CI	ICLES.		
A. D.	Kali	Initial	Vik	Intercal	Sak			60 Y	ears.	13	Rishi.	Baim.
	Yuga.	Day.		Month.		Initia	Day.	S. Sid.	Tel.	Years.	Sapt. 1	Chedl Sam. Haraha Kâl.
	1.11								53			1.1
1171		25 Mar	1228			We 10			1.1.1.1.1.1.1	-		922 5
•1172		24 -	1229		1094		Feb	30	26	1 C C 1 C C C C	10	923 5
1173	74	24 -	1230		1095	22.23	Mar	31	27	Mågh	49	924 56
1174	75	25 -	1231	***	1096		Mar	32	28	Phal	50	925 34
1175		25 -	1232	Chait	1000	Mo 24		33	29	Chait	51	926 36
•1176	77	24 -	1233			Sa 13		34	30	Vais	52	927 57
1177	78	21 -	1234	1.000	1.55.55	We 2		35	31	Jyesh	53	928 57
1178	79	25 -	1235		x	We 22		36	32	Ashad	54	929 57
1179	1.00	25 -	1236		1101		Mar	37	33	Sråv	55	930 M
•1180	4281	24 -	1237	Ashad	110?	Th 28	Feb	38	34	Bhåd	56	931 17
1181	4282	24 Mar	1238		1103	We 18	Mar	39	35	Aswa	57	932 57
1182		25 -	1239		1104	Mo 8	Mar	40	36	Kirt	58	933 57
1183	84	25 -	1240	Contraction of the second		Fr 25		41	37	Agra	59	934 57
•1184	85	24 -	1241			Th 15		42	38	Paush	60	935 57
1185	86	24 -	1242	Bhàd	1107	Mo 4	Mat	43	39	Magh	61	936 57
1186	87	25 -	1243		1105	Mo 24	Mar	44	40	Phål	62	937 58
1187	88	25 -	1214		1109	Fr 13	Mar	45	41	Chait	63	938 58
•1188	89	24 -	1245	Srav	1110	Tu 1	Mar	46	42	Vais	64	939 58
1189	90	24 -	1246		1111	Mo 20	Mar	47	43	Jyesh	65	940 58
1190	4201	25 —	1247	***	1112	Sa 10	Mar	48	44	Ashad	66	941 58
1191	4292	25 Mar	1248	Jyesh	1113	We 27	Feb	49	45	Sráv	67	942 58
+1192	93	24 -	1249			Mo 16	10 A. 10	50	46	Bhåd	68	943 58
1193	91	25 -	1250	t	1115		Mar	51	47	Aswa	69	944 58
1194	95		1251	Chait		We 23		52	48	Kart	70	915 5
1195	96	25 -	1252		1	Tu 14		53	49	Agra	71	946 58
•1196	97	24 -	1253	Srâv	1118	-0.0	Mar	54	50	Paush	72	947 50
1197	98	25 -	1254		1	Sa 22		55	51	Magh	73	945 5
1198	99	25 -	1255		1.000	We 11		56	52	Phảl	74	949 0
1199	4300	2.0	1256	Jyesh	1121	10000	8 Feb	57	53	Chait	75	950 50
*1200	1 2 2 2 2	24 -	1257		1.000	Sa 18			72.54	Vais	76	931 55

# General Table of Corresponding Dates.

† Agrahayana omitted, and Aswina intercalary.

## General Tuble of Corresponding Dates.

	Solai	t-YE	AR.		LUNI-S	OLAR	УКА	<b>B.</b>		JUP	TER-CY	CLES.			
<b>A</b> . D.	Kali		tial	Vik Sam	Intercal Month.	Sak Sal.	Init	ial	Day.	60 Y	ears.	12 Years.	Sapt. Rishi.	Chedi Sam.	ha Kâl.
	Yuga.		a <b>y</b> .	Sam		581.				S. Sid.	Tel.	I ears.	Sapt.	Ched	Harsha
1201	4302	25	Mar	1257		1123	Th	8	Mar	<b>19</b> .59	<b>72.</b> 55	Jyesh	77	952	595
1202	03	25	_	1258	Vais	1124	Mo		Feb	60	56	Ashad	78	953	596
1203	04	25		1259		1125	S	16	Mar	20. 1	57	Srâv	79	954	597
<b>*</b> 1204	05	2 <b>4</b>	-	1260	Bhâd	1426	Th	4	Mar	2	58	Bhâd	80	955	<b>59</b> 8
1205	06	<b>25</b>	-	1261		1127	Th	24	Mar	3	59	Aswa	81	956	599
1206	07	25		1262		1128	Mo	13	Mar	4	60	Kârt	82	957	600
1207	08	25	-	1263	Ashad	1129	Fr	2	Mar	5	73. 1	Agra	83	958	601
<b>*</b> 1208	09	24	-	1264	•••	1130	We	19	Mar	6	2	Paush	84	959	602
1209	10	25		1265		1131	Mo	9	Mar	7	3	Mågh	85	960	603
1210	4311	25	-	1266	Jyesh	1132	Fr	26	Feb	8	4	Phâl	86	961	604
							_					~ .			
1211	4312			1267		1133			Mar	9	δ	Chait	87	962	605
*1212 1012	13	25	-	$1268 \\ 1269$	110 11 10	1134		-	Mar	10	6	Vais Treeb	88 89	963 064	606 607
1213 1214	14	25		1269 1270		1135 1136			Mar	11	7	Jyesh Ashad	90	964 965	608
1214	15 16	$25 \\ 25$		1270		1130	Fr Tu		Mar Mar	12	8	Srâv	91	965 966	609
•1216	17	25 25	_	1272	Srâv	1138			Mar	13	9	Bhâd	92	967	610
1210	18	25 25		1273	····	1139			Mar	14 15	10 11	Aswa	93	968	611
1218	19	25	_	1274	 Jyesh	1140			Feb	10	11	Kârt	94	969	612
1219	20	25	_	1275		1141			Mar	17	12	Agra	95	970	613
<b>•</b> 1220	4321	25	_	1276		1142	8		Mar	18	14	Paush	96	971	614
1221	4322	25	Mar	1277	Vais	1143	We	24	Feb	19	15	Mâgh	97	972	615
1222	23	25		1278		1144	We	16	Mar	20	16	Phâl	98	973	616
1223	24	25		1279	Bhâd	1145	S	5	Mar	21	17	Chait	99	974	617
*1224	25	25		1280		1146	Sa	23	Mar	22	18	Vais	100	975	618
1225	26	25	-	1281		1147	We	12	Mar	23	19	Jyesh	1	976	619
1226	27	25	_	1282	Ashad	1148	We	1	Mar	21	20	Ashad	2	977	620
1227	28	25	—	1283		1449	Sa	<b>2</b> 0	Mar	25	21	Srâv	3	978	621
<b>*</b> 1228	29	25		1284		1150	Th	9	Mar	26	22	Bhâd	4	979	622
1229	30	25	-	1285	Jyesh	1151	Mo	26	Feb	27	23	Aswa	5	<b>9</b> 80	623
1230	<b>43</b> 31	25	-	1286		1152	S	17	Mar	<b>20</b> .28	<b>73</b> .24	Kårt	6	981	624
						1									

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## General Table of Corresponding Dates.

*1232       33       25       1289        1154       Th       25       Mar       30       26       Paush       8       98         1233       31       25       1290        1155       Mo       14       Mar       31       27       Mágh       9       98         1234       35       25       1291       Sråv       1156       Fr       3       Mar       32       28       Phál       10       98         1235       36       25       1292        1157       Th       22       Mar       33       29       Chait       11       98         1237       38       25       1295        1160       Mo       19       Mar       36       32       Ashad       14       98         1239       40       25       1295        1163       Fr       15       Mar       37       33       Sråv       15       99         *1240       4341       25       1297       Vais       1163       Fr       15       Mar       39       35       Aswa       17       99         1243       44       25<		SOLAR	-YEAR.		LUNI-S	OLAR	YE.	A RL		JUPITE	R-C	TCLES,			1
1231       4332       25 Mar       1288       Aswa       1153       Th       6       Mar       20.29       73. 25       Agra       7       98         1232       33       25 —       1289        1154       Th       25       Mar       30       26       Paush       8       98         1233       31       25 —       1291       Sråv       1155       Mo       14       Mar       31       27       Mágh       9       98         1234       35       25 —       1291       Sråv       1155       Mo       14       Mar       32       28       Phål       10       98         1235       36       25 —       1292        1157       Th<22       Mar       33       29       Chait       11       98         1237       38       25 —       1296        1161       Ta       8       Mar       35       31       Jyesh       13       98         1239       40       25 —       1296        1163       Fr       15 <mar< td="">       39       35       Aswa       17       99         1240       4341       25 —</mar<>	A. D.						Ini	tial	Day.		-		t. Rishi.	odi Sam.	Harsha Kal.
*1232       33       25       1289        1154       Th       25       Mar       30       26       Paush       8       98         1233       31       25       1290        1155       Mo       14       Mar       31       27       Mágh       9       98         1233       36       25       1291       Sråv       1156       Fr       3       Mar       32       28       Phál       10       98         1235       36       25       1292        1157       Th       22       Mar       33       29       Chait       11       98         1237       38       25       1292        1150       Mar       36       32       Ashad       14       98         1239       40       25       1295        1163       Fr       15       Mar       37       33       Sråv       15       99         *1240       4341       25       1297       Vais       1163       Fr       15       Mar       40       36       Kårt       18       99         1241       4342       25       1300 <td< th=""><th></th><th>1</th><th></th><th></th><th>_</th><th>!</th><th></th><th>_</th><th></th><th>S. Sid. Te</th><th>1</th><th></th><th>Rul</th><th>Ch</th><th>Ha</th></td<>		1			_	!		_		S. Sid. Te	1		Rul	Ch	Ha
*1232       33       25       1289        1154       Th       25       Mar       30       26       Pansh       8       98         1233       31       25       1290        1155       Mo       14       Mar       31       27       Mágh       9       98         1234       35       25       1291       Sråv       1156       Fr       3       Mar       32       28       Phál       10       98         1235       36       25       1292        1157       Th       22       Mar       33       29       Chait       11       98         1237       38       25       1292        1160       Mo       19       Mar       36       32       Ashad       14       98         1239       40       25       1296        1163       Fr       15       Mar       37       33       Sråv       15       99         *1240       4344       25       1299       Bhåd       1164       Tu       4       Mar       13       36       Kårt       18       99         1243       44       25 </td <td>1231</td> <td>4332</td> <td>25 Mar</td> <td>1288</td> <td>Aswa</td> <td>1153</td> <td>Th</td> <td>6</td> <td>Mar</td> <td>20.29 73.</td> <td>25</td> <td>Адта</td> <td>7</td> <td>982</td> <td>61</td>	1231	4332	25 Mar	1288	Aswa	1153	Th	6	Mar	20.29 73.	25	Адта	7	982	61
1233       31       25       1290        1155       Mo       14       Mar       31       27       Mágh       9       98         1234       35       25       1291       Sråv       1156       Fr       3       Mar       32       28       Phál       10       98         1235       36       25       1292        1157       Th       22       Mar       33       29       Chait       11       98         1237       38       25       1295        1160       Mo       19       Mar       36       32       Ashad       14       98         1239       40       25       1295        1163       Fr       15       Mar       37       33       Sråv       15       99         *1240       4341       25       1297       Vais       1163       Fr       15       Mar       37       33       Sråv       15       99         *1241       4342       25       Mar       1163       Fr       15       Mar       40       36       Kårt       18       99         1245       46       25       130	*1232	33		1.00						30,	26	Paush	8	983	62
1234       35       25       1291       Sråv       1156       Fr       3       32       28       Phål       10       98         1235       36       25       1292        1157       Th 22       Mar       33       29       Chait       11       98         1237       38       25       -       1294       Jyesh       1155       Tu 11       Mar       34       30       Vais       12       98         1238       39       25       -       1295        1160       Mo<19	1233	34	25 -	1290		1155	Mo	14	Mar	31	27	Mágh	9	. 981	62
*1236 37 25 - 293 1155 Tu 11 Mar 34 30 Vais 12 98 1237 38 25 - 4294 Jyesh 1159 Sa 28 Feb 35 31 Jyesh 13 98 1239 40 25 - 1295 1160 Mo 19 Mar 36 32 Ashad 14 98 1239 40 25 - 1297 Vais 1162 S 26 Feb 38 34 Bhåd 16 99 *1240 4341 25 - 1297 Vais 1162 S 26 Feb 38 34 Bhåd 16 99 *1241 4342 25 Mar 1298 1163 Fr 15 Mar 39 35 Aswa 17 99 *1252 43 25 - 1299 Bhåd 1164 Tu 4 Mar 40 36 Kärt 18 99 *1243 44 25 - 1300 1165 Mo 23 Mar 41 37 Agra 19 99 *1244 45 25 - 1301 1166 Sa 12 Mar 44 39 Phål 21 99 1245 46 25 - 1302 Ashad 1167 We 1 Mar 44 39 Phål 21 99 1246 47 25 - 1303 1168 Tu 20 Mar 45 40 Chait 22 99 1247 48 25 - 1304 1169 Sa 9 Mar 46 41 Vais 23 99 *1248 49 25 - 1305 Jyesh 1170 We 26 Feb 47 42 Jyesh 24 99 1249 50 25 - 1306 1171 We 17 Feb 48 43 Ashad 25 100 1250 4351 25 - 1307 Aswa 1172 S 6 Mar 49 44 Srâv 26 100 1250 4351 25 - 1309 1176 S 22 Feb 53 45 Bhåd 27 100 1251 4332 26 Mar 1308 1173 Sa 25 Mar 50 45 Bhåd 27 100 1253 56 26 - 1311 1176 S 22 Feb 53 45 Agra 30 100 1254 55 26 - 1311 1176 Mo 3 Mar 52 47 Kårt 29 100 1255 65 26 - 1312 1177 Th 11 Mar 54 49 Paush 31 100 *1256 57 25 - 1303 Jyesh 1178 Mo 28 Feb 55 60 Már 49 Paush 31 100 *1256 57 25 - 1313 Jyesh 1178 Mo 28 Feb 55 60 Már 49 Paush 31 100 *1256 57 25 - 1313 Jyesh 1178 Mo 28 Feb 55 60 Már 49 Paush 31 100 *1256 57 25 - 1313 Jyesh 1178 Mo 28 Feb 55 60 Már 49 Paush 31 100 *1256 57 25 - 1313 Jyesh 1178 Mo 28 Feb 55 60 Már 49 Paush 31 100 *1256 57 25 - 1314 1179 S 18 Mar 56 51 Phål 33 100 1258 59 23 - 1315 $\dagger$ 1180 Th 7 Mar 57 52 Chait 34 100	1234	35	25 -	1291		1156	Fr	3	Mar	32	28	Phál	10	985	63
*1236 37 25 - 295 1155 Tn 11 Mar 34 30 Vais 12 98 1237 38 25 - 1294 Jyesh 1159 Sa 28 Feb 35 31 Jyesh 13 98 1238 39 25 - 1295 1160 Mo 19 Mar 36 32 Ashad 14 98 1239 40 25 - 1296 1161 Tn 8 Mar 37 33 Sråv 15 99 *1240 4341 25 - 1297 Vais 1162 S 26 Feb 38 34 Bhåd 16 99 1241 4342 25 Mar 1298 1163 Fr 15 Mar 40 36 Kårt 18 99 1243 44 25 - 1300 1165 Mo 23 Mar 40 36 Kårt 18 99 1243 44 25 - 1300 1165 Mo 23 Mar 41 37 Agra 19 99 *1244 45 25 - 1301 1166 Sa 12 Mar 44 39 1245 46 25 - 1302 Ashad 1167 We 1 Mar 44 39 1246 47 25 - 1303 1165 Tu 20 Mar 45 40 Chait 22 99 1247 48 25 - 1303 1165 Tu 20 Mar 46 41 Vais 23 90 *1248 49 25 - 1304 1169 Sa 9 Mar 46 41 Vais 23 90 *1248 49 25 - 1305 Jyesh 1170 We 26 Feb 47 42 Jyesh 24 99 1249 50 25 - 1306 1171 We 17 Feb 48 43 Ashad 25 100 1250 4351 25 - 1307 Aswa 1172 S 6 Mar 49 44 Sråv 26 100 1251 4332 26 Mar 1308 1173 Sa 25 Mar 50 45 Bhåd 27 100 1253 54 25 - 1310 Sråv 1175 Mo 3 Mar 52 47 Kårt 29 100 1254 55 26 - 1311 1176 S 22 Feb 53 45 Agra 30 100 1255 65 26 - 1312 1177 Th 11 Mar 51 46 Aswa 28 100 1255 65 26 - 1312 1177 Th 11 Mar 54 49 Paush 31 100 *1256 57 25 - 1303 Jyesh 1176 Mo 28 Feb 55 50 Mår 49 Paush 31 100 *1256 57 25 - 1313 Jyesh 1176 Mo 28 Feb 55 50 Mår 49 Paush 31 100 *1256 57 25 - 1313 Jyesh 1178 Mo 28 Feb 55 50 Mår 31 00 *1256 57 25 - 1313 Jyesh 1178 Mo 28 Feb 55 50 Mår 31 00 *1256 57 25 - 1314 1179 S 18 Mar 56 51 Phål 32 100 1257 58 25 - 1315 $† 1180$ Th 7 Mar 57 52 Chait 34 100 *1258 59 23 - 1315 $† 1180$ Th 7 Mar 57 52 Chait 34 100	1235	36	25 -	1292		1157	Th	22	Mar	33	29	Chait	11	986	62
1237       38       25       1294       Jyesh       1159       Sa       28       Feb       35       31       Jyesh       13       98         1238       39       25       1295        1160       Mo       19       Mar       36       32       Ashad       14       98         1239       40       25       1296        1161       Tu       8       Mar       37       33       Sråv       15       99         *1240       4341       25       1297       Vais       1162       S       26       Feb       38       34       Bhåd       16       99         1241       4342       25       Mar       1298        1163       Fr       15       Mar       39       35       Aswa       17       99         1243       44       25       1300        1165       Mo       23       Mar       19       99         1244       45       25       1303        1166       Sa       12       Mar       44       39       Phål       19       91         1246       47       25       1303	*1236	1.000	25 -	.293		10000				34.	30	Vais	12	987	63
1238       39       25       1295        1160       Mo       19       Mar       36       32       Ashad       14       98         1239       40       25       1296        1161       Tu       8       Mar       37       33       Sråv       15       99         *1240       4341       25       1297       Vais       1162       S       26       Feb       38       34       Bhåd       16       99         1241       4342       25       Mar       1298        1163       Fr       15       Mar       39       35       Aswa       17       99         1243       44       25       1300        1165       Mo<23	1237	36	25 -	1294						35	31	Jyesh	13	988	63
1239       40       25       1296        1161       Tu       8 Mar       37       33       Sråv       15       99         *1240       4341       25       1297       Vais       1162       S       26       Feb       38       34       Bhåd       16       99         1241       4342       25       Mar       1298        1163       Fr       15       Mar       39       35       Aswa       17       99         1252       43       25       1299       Bhåd       1164       Tu       4       Mar       40       36       Kårt       18       99         1243       44       25       1300        1165       Mo 23       Mar       41       37       Agra       19       99         *1244       45       25       1301        1166       Sa       12       Mar       44       39       Phål       21       99         1246       47       25       1304        1169       Sa       9       Mar       45       40       Chait       22       99         1247       48       25       <	1238	39	25 -	1295						36	32	Ashad	14	959	63
*1240 4341 25 - 1297 Vais 1162 S 26 Feb 38 34 Bhåd 16 99 1241 4342 25 Mar 1298 1163 Fr 15 Mar 39 35 Aswa 17 99 1252 43 25 - 1299 Bhåd 1164 Tu 4 Mar 40 36 Kårt 18 99 1243 44 25 - 1300 1165 Mo 23 Mar 41 37 Agra 19 99 *1244 45 25 - 1301 1166 Sa 12 Mar 42 38 Paush 20 99 1245 46 25 - 1302 Ashad 1167 We 1 Mar 44 39 $\bullet$ Phål 21 99 1246 47 25 - 1303 1168 Tu 20 Mar 45 40 Chait 22 99 1247 48 25 - 1304 1169 Sa 9 Mar 46 41 Vais 23 99 *1248 49 25 - 1305 Jyesh 1170 We 26 Feb 47 42 Jyesh 24 99 1249 50 25 - 1306 1171 We 17 Feb 48 43 Ashad 25 100 1250 4351 25 - 1307 Aswa 1172 S 6 Mar 49 44 Sråv 26 100 *1251 4352 26 Mar 1308 1173 Sa 25 Mar 50 45 Bhåd 27 100 *1253 54 25 - 1300 Sråv 1175 Mo 3 Mar 52 47 Kårt 29 100 1254 55 26 - 1311 1176 S 22 Feb 53 48 Agra 30 100 1255 56 26 - 1312 1177 Th 11 Mar 54 49 Paush 31 100 *1256 57 25 - 1313 Jyesh 1178 Mo 28 Feb 55 50 Mågh 32 100 1257 58 25 - 1314 1179 S 18 Mar 56 51 Phål 33 100 1258 59 25 - 1315 $\ddagger$ 1180 Th 7 Mar 57 52 Chait 34 100	1239	40	25 -	1296		0000				37	33	Srav	15	990	63
1252       43       25       1299       Bhåd       1164       Tu       4       Mar       40       36       Kårt       18       99         1243       44       25       1300        1165       Mo 23       Mar       41       37       Agra       19       99         *1243       44       25       1301        1165       Mo 23       Mar       41       37       Agra       19       99         *1244       45       25       1301        1165       Mo 23       Mar       41       37       Agra       19       99         1245       46       25       1303        1168       Tu 20       Mar       44       39       Phål       21       99         1246       47       25       1305       Jyesh       1170       We 26       Feb       47       42       Jyesh       24       99         1248       49       25       1305       Jyesh       1170       We 26       Feb       47       42       Jyesh       24       99         1249       50       25       1306        1171       We 17	*1240	4341	25 —	1297						38	34	Bhåd	16	991	63
1252       43       25 -       1299       Bhād       1164       Tu       4       Mar       40       36       Kārt       18       99         1243       44       25 -       1300        1165       Mo 23       Mar       41       37       Agra       19       99         *1244       45       25 -       1301        1165       Mo 23       Mar       41       37       Agra       19       99         *1245       46       25 -       1302       Ashad       1167       We       1       Mar       42       38       Paush       20       99         1246       47       25 -       1303        1168       Tu       20       Mar       45       40       Chait       22       99         1247       48       25 -       1305       Jyesh       1170       We       26       Feb       47       42       Jyesh       24       99         1249       50       25 -       1306        1171       We       17       Feb       48       43       Ashad       25       100         1250       4351       25 -	1241	4342	25 Mar	1298		1163	Fr	15	Mar	39	35	Aswa	17	992	63
1243       44       25 —       1300        1165       Mo       23       Mar       41       37       Agra       19       99         *1244       45       25 —       1301        1165       Mo       23       Mar       41       37       Agra       19       99         1245       46       25 —       1302       Ashad       1167       We       1       Mar       42       38       Paush       20       99         1246       47       25 —       1303        1165       Tu<20	1252	43	25 -	1299		1164	Tu	4	Mar	40	36	Kårt	18	993	63
*1244       45 $25 - 1301$ 1166       Sa       12 Mar       42       38       Paush       20       99         1245       46 $25 - 1302$ Ashad       1167       We       1 Mar       44       39       Phål       21       99         1246       47 $25 - 1303$ 1168       Tu       20       Mar       45       40       Chait       22       99         1247       48 $25 - 1303$ 1169       Sa       9       Mar       46       41       Vais       23       99         *1248       49 $25 - 1305$ Jyesh       1170       We       26       Feb       47       42       Jyesh       24       99         1249       50 $25 - 1306$ 1171       We       17       Peb       48       43       Ashad       25       100         1250       4351 $25 - 1307$ Aswa       1172       S       6       Mar       49       44       Sråv       26       100         *1251       4352       26       Mar       1173       Sa       25       Mar	1243	44	25 -	1300		1165	Mo	23	Mar	41	37	Agra	19	994	63
1246       47       25       1303        1168       Tu       20       Mar       45       40       Chait       22       99         1247       48       25       1304        1169       Sa       9       Mar       46       41       Vais       23       99         *1248       49       25       1305       Jyesh       1170       We       26       Feb       47       42       Jyesh       24       99         1249       50       25       1306        1171       We       17       Peb       48       43       Ashad       25       100         1250       4351       25       1307       Aswa       1172       S       6       Mar       49       44       Sráv       26       100         1251       4352       26       Mar       1173       Sa       25       Mar       50       45       Bhåd       27       100         *1252       53       25       1309        1173       Sa       25       Mar       50       45       Bhåd       27       100         *1253       54       25       <	•1244	45	25 -	1301		1166	Sa	12	Mar	42	38	Paush	20	995	63
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1245	46	25 -	1302	Ashad	1167	We	1	Mar	9 44	39	• Phal	21	996	63
1247       48       25       1304        1169       Sa       9       Mar       46       41       Vais       23       99         *1248       49       25       1305       Jyesh       1170       We       26       Feb       47       42       Jyesh       24       99         1249       50       25       1306        1171       We       17       Feb       48       43       Ashad       25       100         1250       4351       25       1307       Aswa       1172       S       6       Mar       49       44       Sråv       26       100         1251       4352       26       Mar       1308        1173       Sa       25       Mar       49       44       Sråv       26       100         *1251       4352       26       Mar       1308        1173       Sa       25       Mar       40       45       Bhåd       27       100         *1252       53       25       1309        1174       Th<14	1246	47.	25 -	1303		1165	Tu	20	Mar	45	40	Chait	22	997	64
*1248 49 25 - 1305 Jyesh 1170 We 26 Feb 47 42 Jyesh 24 99 1249 50 25 - 1306 1171 We 17 Feb 48 43 Ashad 25 100 1250 4351 25 - 1307 Aswa 1172 S 6 Mar 49 44 Sráv 26 100 1251 4352 26 Mar 1308 1173 Sa 25 Mar 50 45 Bhâd 27 100 *1252 53 25 - 1309 1174 Th 14 Mar 51 46 Aswa 28 100 1253 54 25 - 1310 Sráv 1175 Mo 3 Mar 52 47 Kárt 29 100 1254 55 26 - 1311 1176 S 22 Feb 53 48 Agra 30 100 1255 56 26 - 1312 1177 Th 11 Mar 54 49 Paush 31 100 *1256 57 25 - 1313 Jyesh 1178 Mo 28 Feb 55 50 Mágh 32 100 1257 55 25 - 1314 1179 S 18 Mar 56 51 Phâl 33 100 1258 59 25 - 1315 $\ddagger$ 1180 Th 7 Mar 57 52 Chait 34 100	1247	48	25 -	1304						46	41	Vais	23	998	64
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	*1248	49	25 -	1305		1170	We	26	Feb	47	42	Jyesh	24	999	64
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1249	50	25 -	1306						48	43	Ashad	25	1000	61
*1252       53       25       1309        1174       Th       14       Mar       51       46       Aswa       28       100         1253       54       25       1310       Sråv       1175       Mo       3       Mar       52       47       Kårt       29       100         1253       54       25       1310       Sråv       1175       Mo       3       Mar       52       47       Kårt       29       100         1254       55       26       1311        1176       S       22       Feb       53       48       Agra       30       100         1255       56       26       1312        1177       Th       11       Mar       54       49       Paush       31       100         *1256       57       25       1313       Jyesh       1178       Mo       28       Feb       55       50       Mågh       32       100         1257       55       25       1314        1179       S       18       Mar       56       51       Phål       33       100         1258       59 <td< td=""><td>1250</td><td>4351</td><td>25 —</td><td>1307</td><td>Aswa</td><td></td><td></td><td></td><td></td><td>49</td><td>44</td><td>Sráv</td><td>26</td><td>1001</td><td>61</td></td<>	1250	4351	25 —	1307	Aswa					49	44	Sráv	26	1001	61
*1252       53       25       1309        1174       Th       14       Mar       51       46       Aswa       28       100         1253       54       25       1310       Sråv       1175       Mo       3       Mar       52       47       Kårt       29       100         1253       54       25       1310       Sråv       1175       Mo       3       Mar       52       47       Kårt       29       100         1254       55       26       1311        1176       S       22       Feb       53       48       Agra       30       100         1255       56       26       1312        1177       Th<11	1251	4352	26 Mar	1308		1173	Sa	25	Mar	50	45	Bhâd	27	1002	64
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				1.11		10.00				1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	100	10 C 0 C 1	28	1003	
1254       55       26       1311        1176       S       22       Feb       53       48       Agra       30       100         1255       56       26       1312        1177       Th       11       Mar       54       49       Paush       31       100         *1256       57       25       1313       Jyesh       1178       Mo       28       Feb       55       50       Magh       32       100         *1257       58       25       1314        1179       S       18       Mar       56       51       Phål       33       100         1257       58       25       1314        1179       S       18       Mar       56       51       Phål       33       100         1258       59       25       1315       +       1180       Th       7       Mar       57       52       Chait       34       100	1.55									1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.			29	1004	
1255         56         26         1312          1177         Th         11         Mar         54         49         Paush         31         100           *1256         57         25         1313         Jyesh         1178         Mo         28         Feb         55         50         Magh         32         100           1257         58         25         1314          1179         S         18         Mar         56         51         Phål         33         100           1258         59         25         1313         +         1179         S         18         Mar         56         51         Phål         33         100           1258         59         25         -         1313         +         1179         S         18         Mar         56         51         Phål         33         100           1258         59         25         -         1313         +         1180         Th         7         57         52         Chait         34         100											1.11		30	10:15	K
*1256         57         25         1313         Jyesh         1178         Mo 28         Feb         55         50         Mägh         32         100           1257         58         25         1314          1179         S         18         Mar         56         51         Phål         33         100           1258         59         25         1315         †         1180         Th         7         Mar         57         52         Chait         34         100	1.1.1.1.1			1000			1000						31	1006	61
1257 55 25 - 1314 1179 S 18 Mar 56 51 Phâl 33 100 1258 59 25 - 1315 † 1180 Th 7 Mar 57 52 Chait 34 100	10000				1.195	1	10.00				1.5		32	1007	65
1258 59 25 - 1315 + 1180 Th 7 Mar 57 52 Chait 34 100		1.1.1.1		1.000		1 COR					1		33	1008	
	100 million (1997)	1.0		1022			1.5	-			100		34	1009	
	1259	60	26 -	1316						58	53	Vais	35	1010	
				12.03							-		36	1011	

† Agrahayana omitted, and Agrahayana intercalary.

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	SOLAR	-YEAR.		LUNI-S	OLAR	YEA	R.		JUPI	TER-CY	CLES.		
A. D.	Kali	Initial	Vik	Intercal	Sak				60 Y	ears.	12	Rishi.	Sam.
	Yuga.	Day.	Sam		Sal.	Init	ial	Day.	S. Sid.	Tel.	Years.	Sapt.	Chedi Sam.
1261	4362	25 Mar	1318	Bhâd	1183	Fr	4	Mar	20.60	73.55	Ashad	37	1012
1262	63	25 -	1319		1184	Th	23	Mar	21. 1	56	Srâv	38	1013
1263	64	26 -	1320		1185	Mo	12	Mar	2	57	Bhåd	39	1014
*1264	65	25 -	1321	Ashad	1186	Sa	1	Mar	3	58	Aswa	40	1015
1265	66	25 -	1322		1187	Fr	20	Mar	4	59	Kârt	41	1016
1266	67	25 -	1323		1188	Tu	9	Mar	5	60	Agra	42	1017
1267	68	26 -	1324	Jyesh	1189	s	27	Feb	6	74.1	Paush	43	1018
*1268	69	25 -	1325		1190	Sa	17	Mar	7	2	Mågh	44	1019
1269	70	25 -	1326	Aswa	1191	We	G	Mar	8	3	Phâl	45	1020
1270	4371	26 —	1327		1192	Tu	25	Mar	9	4	Chait	46	1021
1271	4372	26 Mar	1328		1193	Sa	14	Mar	-10	5	Vais	47	1022
*1272	73	25 -	1329	Ashad	1194	Fr	2	Mar	11	6	Jyesh	48	1023
1273	74	25 -	1330		1195	Tu	21	Mar	12	7	Ashad	49	1024
1274	75	25 -	1331		1196		100	Mar	13	8	Srâv		1025
1275	76	26 -	1332	Jyesh	1197		28	Feb	14	9	Bhâd		1026
*1276	77	25 -	1333		1198		18	Mar	15	10	Aswa	52	1027
1277	† 78	25 -	1334	Phâl	1199	S	7	Mar	16	11	Kårt	53	1028
1278	79	26 -	1335		1200		26	Mar	17	12	Agra	54	1029
1279	80	26 -	1336		1201	Th	16	Mar	18	13	Paush	55	1030
*1280	4381	25 —	1337	Srâv	1202	Mo	4	Mar	19	14	Mâgh	56	1031
1281	4382	25 Mar	1338		1203	S	23	Mar	20	15	Phál	57	1032
1282	83	26 -	1339		1204	Th	12	Mar	21	16	Chait	58	1033
1283	84	26 -	1340	Ashad	1205	Tu	2	Mar	22	17	Vais	59	1034
*1284	85	25 -	1341		1206	S	19	Mar	23	18	Jyesh	60	1035
1285	86	25 -	1342		1207	Fr	9	Mar	24	19	Ashad	61	1036
1286	87	26 —	1343	Vais	1208	Tu	26	Feb	25	20	Sráv	62	1037
1287	88	26 -	1344		1209	Mo	17	Mar	26	21	Bhåd	63	1038
•1288	89	25 -	1345	Bhâd	1210	Fr	5	Mar	27	22	Aswa	64	1039
1289	90	25 -	1346		1211	Th	24	Mar	28	23	Kårt	65	1040
1290	4391	26 -	1347		1212	Tu	14	Mar	21.29	74.24	Agra	66	1041

## General Table of Corresponding Dates.

+ Pausha omitted, and Agrahayana intercalary.

## General Table of Corresponding Dates.

	SOLAT	-YEAR.	1.1	LUNI-S	OLAR	YEA	R.		JUPI	TEB-CY	CLES.		1
A. D.	Kali	Initial	Vik	Intercal	Sak				60 Y	ears.	12	Rishi.	Sam.
	Yuga.	Day.		Month.	Sal.	Init	ial	Day.	S. Sid.	Tel.	Years.	Sapt. Rishi.	Chedi Sam
1291	4392	26 Mar	1348	Ashad	1213	Sa	3	Mar	21.30	74.25	Paush	67	1042
*1292	93	25 -	1349		1214	Fr	21	Mar	31	26	Mågh	68	1043
1293	94	25 -	1350		1215	Tu	10	Mar	32	27	Phål	69	1044
1294	95	26 -	1351	Jyesh	1216			Feb	33	28	Chait	70	1045
1295	96	26 -	1352		1217	Sa	19	Mar	34	29	Vais	71	1046
*1296	197	25 -	1353	Phâl	1218	Th	8	Mar	35	30	Jyesh	72	1047
1297	98	25 -	1354		1219	Tu	26	Mar	36	31	Ashad	73	1048
1298	99	26 -	1355		1220	s	16	Mar	37	32	Sråv	74	1049
1299	4400	26 -	1356	Srâv	1221	Fr	6	Mar	38	33	Bhåd	75	1050
*1300	4401	25 —	1357		1222	We	23	Mar	39	34	Aswa	76	1051
1301	4402	26 Mar	1358		1223	s	12	Mar	40	35	Kârt	77	1052
1302	03	26 -	1359	Ashad	1224	Th	1	Mar	41	36	Agra	78	1053
1303	04	26 -	1360.		1225	We	20	Mar	42	37	Paush	779	1054
*1304	05	25 -	1361		1226	S	8	Mar	43	38	Mågh	80	1055
1305	06	26 -	1362	Vais	1227	Fr	26	Mar	44	39	Phâl	81	1056
1306	07	26 -	1363		1228	Th	17	Mar	45	40	Chait	82	1057
1307	08	26 -	1364	Bhâd	1229	Mo	6	Mar	46	41	Vais	83	1058
*1308	09	25 -	1365		1230	s	24	Mar	47	42	Jyesh	84	1059
1309	10	26 -	1366		1231	Fr	14	Mar	48	43	Ashad	85	1060
1310	4411	26 -	1367	Ashad	1232	Tu	3	Mar	49	44	Sråv	86	1061
1311	4412	26 Mar	1368		1233	Mo	22	Mar	50	45	Bhâd	87	1062
*1312	13	25 -	1369		1234	Fr	10	Mar	51	46	Aswa	88	1063
1313	14	26 -	1370	Jyesh	1235	We	28	Feb	52	47	Kårt	89	1064
1314	15	26 -	1371		1236	Mo	18	Mar	53	48	Agra	90	1065
1315	\$16	26 -	1372	Phâl	1237	Fr	7	Mar	54	49	Paush	91	1066
*1316	17	25 -	1373		1238	Th	25	Mar	55	50	Mågh	92	1067
1317	18	26 -	1374		1239	Tu	15	Mar	56	51	Phâl	93	1068
1318	19	26 -	1375	Srâv	1240	S	4	Mar	57	52	Chait	94	1069
1319	20	26 -	1376		1241	Fr	23	Mar	58	53	Vais	95	1070
*1320	4421	26 -	1377		1242	We	12	Mar	21.59	74.54	Jyesh	96	1071

\*Agrahayana omitted, and Agrahayana intercalary. ‡ Agrahayana omitted, and Kārtika intercalary.

	Solae	e-Yr	CAB.		LUNI-S	OLAR	•Чел	<b>B.</b>		JUP	TEB-C	YCLES.			·
<b>▲.</b> D.	Kali		tial	Vik Sam	Intercal Month.	Sak Sal.	Init	ial	Day.	60 Y	ears.	12	Sapt. Rishi.	i Sam.	
	Yuga.		<b>.y.</b>		Monu.	541.				8. Sid.	Tel.	Years.	Sapt.	Chedi	
1321	4422	26	Mar.	1378	Ashad	1243	s	1	Mar	21.60	74.55	Ashad	97	1072	
1322	23	26	_	1379		1244	Sa.	20	Mar	22. 1	56	Srâv		1073	
1323	24	26	_	1380		1245	We		Mar	2	57	Bhâd		1074	
•1324	25	26		1381	Vais	1246	Mo	27	Feb	3	58	Aswa		1075	
1325	26	26		1382		1247	S	17	Mar	4	59	Kårt	1	1076	
1326	27	26	—	1383	Bhåd	1248	Th	6	Mar	5	60	Agra	2	1077	
1327	28	26		1384		1249	We	25	Mar	6	75. 1	Paush	3	1078	
*1328	29	26	_	1385		1250	Mo	14	Mar	7	2	Mâgh	4	1079	
1329	30	26	_	1386	Ashad	1251	Fr	3	Mar	8	3	Phál	5	1080	
1330	4431	26	—	1387		1252	We	21	Mar	• 10	4	Vais	6	1081	
										Ĩ					
1 <b>8</b> 31	4432	26	Mar.	1388		1253	s	10	Mar	11	5	Jyesh	7	1082	
<b>*13</b> 32	33	20 26		1389		1254			Feb	11	6	Ashad		1082	
1333	34	26		1390	0,000	1255			Mar		7	Srâv		1084	
1334	35	20 26	_	1391		1256			Mar		8	Bhåd	-	1085	
1335	36	26	_	1392		1257		-	Mar		9	Aswa		1086	
<b>*</b> 1336	37	26		1393		1258	<b>~</b>		Mar		-			1000	
1337	38	26	_	1394		1259			Mar			Agra		1088	
1338	39	26	_	1395	D. a.	1260	1	-	Mar		12	Paush		1089	
1339	40	26	_	1396	1	1261	Fr		Mar		13	Mâgh		1090	
<b>*1340</b>	4441	26	_	1397		1262			Mar		14	Phâl		1091	
					ADD GA			•			11	1	10		
						1					1				
1341	4442	0.7	Mar.	1200		1263			76			<b>A</b>		1000	
1341	4442	26 26	mar.	1399		1263	Tu Sa		Mar Mar		15	Chait Vais		1092 1093	
1342	44 44	26 26	_	1400		1265		-	ма) Feb		16	y ais Jy esh		1093	
1313 *1344	45	26 26	-	1401		1200			Mar		17	•		1091	
1345	40 46	26	-	1402	 Bhád	1200	S		Mar Mar	24 25	18 19	Ashad Srâv		1095	
1346	40 47	26 26		1403		1268	-	-	Mar Mar	25		Srav Bhâd		1096	
1310	48	26 26	_	1404		1269	rr Tu		Mar Mar	26 27	20 21	Aswa		1097	
•1348	±0 49	26 26	_	1405	 Ashad	1203	S		Mar Mar	27		Aswa Kârt		1098	
1349	49 50	26 26		1406		1270	л Sa		mar Mar	28 29	22 23			11099	
1349	60 4451	26 26	_	1400		1271			mar Mar	29 <b>22.</b> 30		Agra Paush		1100	
1990	4401	20	_	107		1212	we	10	nur	ææ.30	70.24	T. Trange	20	1101	
								_	_						

## General Table of Corresponding Dates.

	SOLAR	· Y	EAR,		LUNI-S	OLAR	YEAR		JUP	ITER-C	YCLES.		
A. D.	Kali Yuga.		itial Day.	Vik Sam	Intercal Month.	Sak Sal.	Initia	l Day.	60 Y	ears. Tel.	12 Years.	Sapt. Rishi.	Chedi Sam.
1351	4452	26	Mar	1408	Vais	1273	S 2	7 Feb	22.31	75.25	Màgh	27	1102
*1352	53	26		1409		1274		8 Mar	32	26	Phâl	1.50	1103
1353	54	26	_	1410	Bhåd	1275	100	7 Mar	33	27	Chait	1.01	1104
1354	55	26	2	1411		1276	We 2	5 Mar	34	28	Vais	30	1105
1355	56	26	12	1412		1277		5 Mar	35	29	Jyesh	31	1106
*1356	57	26	1	1413	Sráv	1278	100	4 Mar	36	30	Ashad	32	1107
1357	58	26	1	1414		1279	Concerning of the	3 Mar	37	31	Srav	33	1108
1358	59	26		1415		1280	Mo 1	2 Mar	38	32	Bhâd	34	1109
1359	60	26	-	1416	Jyesh	1281	Fr	1 Mar	39	33	Aswa	35	1110
*1360	4461	26	-	1417		1282	Th 2	0 Mar	40	34	Kart	36	un
1361	4462	21	Mar.	1418		1283	Tu	9 Mar	41	35	Agra	37	1112
1362	63	26	1	1419	Vais	1284	Sa 20	Feb	42	36	Paush	38	1113
1363	64	27	-	1420		1285	Fr 1	7 Mar	43	37	Mâgh	39	1114
*1364	65	26		1421	Bhâd	1286	Tu i	5 Mar	44	38	Phâl	40	1115
1365	66	26	-	1422		1287	Mo 2	4 Mar	45	39	Chait	41	1116
1366	67	26	-	1423.		1288	Fr 1	3 Mar	46	40	Vais	42	1117
1367	68	26	-	1424	Ashad	1289	Tu	2 Mar	47	41	Jyesh	43	1118
*1368	69	26	-	1425	,	1290	Tu 2	1 Mar	45	42	Ashad	44	1119
1369	70	26	-	1426		1291	Sa 1	0 Mar	49	43	Sråv	45	1120
1370	4471	26	-	1427	Vais	1292	We 2	7 Feb	50	44	Bhåd	46	1121
1371	4472	27	Mar.	1428		1293	We 1	9 Mar	51	45	Aswa	47	112:
*1372	73	26	-	1429	Bhåd	1294	S	7 Mar	52	46	Kårt	48	1123
1373	74	26	-	1430		1295	Sa 2	6 Mar	53	47	Agra	49	1124
1374	75	26	-	1431	1.	1296	We 1	ő Mar	54	48	Paush	50	1125
1375	76	27	-	1432	Sråv	1297	S	4 Mar	55	49	Mágh	51	1126
*1376	77	26	-	1433		1298	Sa 2	2 Mar	56	50	Phâl	52	1127
1377	78	26	-	1431		1299	We 1	1 Mar	57	51	Chait	53	1128
1378	79	26	-	1435	Jyesh	1300	Mo	1 Mar	58	52	Vais	54	1129
1379	80	72	-	1436		1301	S 2	) Mar	' 59	53	Jyesh	55	1130
*1380	4481	26	-	1437	†	1302	Th	8 Mar	22.60	75.54	Ashad	56	1131

† Kårtika omitted, and Kårtika intercalary.

## General Table of Corresponding Dates.

	SOLAI	R-YEAR.		LUNI-S	OLAB	YE	AB.		JUP	TER-C	ICLES.		
A. D.	Kali	Initial	Vik	Intercal	Sak				60 X	ears.	12	Rishi.	Sam.
a. <i>D</i> .	Yuga.	Day.	Sam	Month.	Sal.	Init	al	Day.	S. Sid.	Tel.	Years.	Sapt. Rishi.	Chedi
1381	4482	26 Mar	1438	Vais	1303	Мо	25	Feb	23. 1	75.55	Srâv	57	1132
1382	83	26 -	1439		1304	s	16	Mar	. 2	56	Bhâd	58	1133
1383	84	26 -	1440	Bhâd	1305	Th	5	Mar	3	57	Aswa	59	1134
*1384	85	26 -	1441		1306	Th	24	Mar	4	58	Kårt	60	1135
1385	86	26 -	1442		1307	Mo	13	Mar	5	59	Agra	61	1136
1386	87	26 -	1443	Ashad	1308	Fr	2	Mar	6	60	Paush	62	1137
1387	88	27 -	1444		1303	Fr	22	Mar	7	76. 1	Mâgh	63	1138
*1388	89	26 -	1445		1310	Tu	10	Mar	8	2	Phål	64	1139
1389	90	26 -	1446	Jyesh	1311	Sa	27	Feb	9	3	Chait	65	1140
1390	4491	26 —	1447		1312	Мо	18	Mar	10	4	Vais	66	1141
1391	4492	27 Mar	1448	Bhâd	1313	Tu	7	Mar	11	5	Jyesh	67	1142
*1392	93	26 -	1449		1314	Mo	25	Mar	12	6	Ashad	68	1143
1393	94	26 —	1450		1315	Fr	14	Mar	13	7	Srâv	69	1144
1394	95	26 -	1451	Srâv	1316	Tu	3	Mar	14	8	Bhâd	70	1145
1395	96	26 -	1452		1317	Mo	22	Mar	15	9	Aswa	71	1146
*1396	97	26 -	1453		1318	Sa	11	Mar	16	10	Kårt	72	1147
1397	98	26 -	1454	Jyesh	1319	We	28	Feb	17	11	Agra	73	1148
1398	99	26 —	1455		1320	Tu	19	Mar	18	12	Paush	74	1149
1399	4500	27 -	1456	t	1321	Sa	8	Mar	19	13	Mâgh	75	1150
*1400	4501	26 —	1457	Chait	1322	Th	26	Feb	20	14	Phâl	76	1151
1401	4502	26 Mar	1458		1323	We	16	Mar	21	15	Chait	77	1152
1402	03	27 -	1459	Bhåd	1324	Mo	6	Mar	22	16	Vais	78	1153
1403	04	27	1460		1325	s	25	Mar	23	17	Jyesh	79	1154
*1404	05	26 —	1461		1326	Th	13	Mar	24	18	Ashad	80	1155
1405	06	26 -	1462	Ashad	1327	Mo	2	Mar	25	19	Sråv	81	1156
1406	07	27 —	1463		1328	Mo	22	Mar	26	20	Bhâd	82	1157
1407	08	27 -	1464		1329	Fr	11	Mar	27	21	Aswa	83	1158
*1408	09	26 —	1465	Vais	1330	Tu	28	Feb	28	22	Kårt	84	1159
1409	10	26 -	1466		1331	S	17	Mar	29	23	Agra	85	1160
1410	4511	27 -	1467	Bhâd	1332	Fr	7	Mar	23.30	76.24	Paush	86	1161

† Agrahayana omitted, and Kårtika intercalary.

#### SOLAR-YEAR. JUPITER-CYCLES. LUNI-SOLAR-YEAR. Sam. Sapt. Rishi 60 Years. Kali Initial Vik Intercal Sak 12 A. D. Initial Day. Sam Month. Sal. Years Chedi Day. Yuga. S. Sid. Tel. 4512 27 Mar 1468 1411 1333 Th 26 Mar 23.31 76.25 Mågh 87 1162 ... 13 26 -1469 Phâl 88 1163 1334 Mo 14 Mar 32 26 \*1412 ... 1470 Ashad 89 1164 14 26 -1335 Fr 3 Mar 33 27 Chait 1413 1471 90 1165 27 -1414 15 1336 Fr 23 Mar 34 28 Vais .... 1472 91,1166 1415 16 27 -1337 Tn 12 Mar 36 29 Ashad .... 1473 92 1167 26 -Sråv \*1416 17 Jyesh 1338 Sa 29 Feb 37 30 1474 18 1339 Fr 19 Mar 93 1168 1417 26 -... 38 31 Bhad 1475 94 1169 1418 19 27 -Kârt 1340 We 9 Mar 39 32 Aswa 1476 20 27 -95 1170 1419 1341 Mo 27 Mar 40 33 Kârt .... 1477 96 1171 \*1420 26 -4521 1342 Sa 16 Mar 41 34 Agra .... 1478 97,1172 1421 4522 26 Mar Srav 1343 We 5 Mar 42 35 Paush 1479 98 1173 1422 23 27 -1344 Tu 24 Mar 43 36 Mägh ... 1480 27 -Phål 991174 1423 24 .... 1345 Sa 13 Mar 44 37 \*1424 26 -1481 Ashad 100 1175 25 1346 Th 2 Mar 45 38 Chait 1482 1:1176 1425 26 27 -1347 We 21 Mar 46 39 Vais .... 1483 2,1177 1426 27 -Jvesh 27 1348 8 10 Mar 47 40 ... 1484 3 1178 1427 27 -28 Vais 1349 Th 27 Feb 48 41 Ashad 1485 \*1428 26 -49 Srâv 4.1179 29 .... 1350, We 17 Mar 42 1486 1429 30 27 -5 1180 Rhâd 1351 Mo 7 Mar 50 43 Bhåd 1487 1430 4531 27 -1352 8 26 Mar 51 6 1181 ... 44 Aswa 1488 4532 27 Mar 1431 1353 Th 15 Mar Kårt 7 1182 52 45 .... 1489 33. 26 -8 1183 \*1432 Ashad 1354 Mo 3 Mar 53 46 Agra 1490 34 27 -9 1184 1433 1355 Mo 23 Mar 54 47 Paush ... 35 27 -1491 10.1185 1434 1356 Fr 12 Mar 55 48 Mägh ... 1492 1435 36 27 -1357 Tu 1 Mar 56 49 Phâl 11 1186 Jyesh 1493 12,1187 \*1436 37 26 -1358 Mo 19 Mar 57 50 Chait .... 1494 9 Mar Vais 13 1188 1437 38 27 -Kart 1359 Sa 58 51 1495 14,1189 1438 39 27 -1360 Th 27 Mar 5952 Jyesh .... 1396 40 27 -1361 Mo 16 Mar 53 15 1190 1439 23.60 Ashad .... 1497 4541 26 -5 Mar Srav 16 1191 \*1440 Sråv 1362 Sa 24. 1 78.54

# General Table of Corresponding Dates.

	SOLAR	-Y1	CAR.		LUNI-S	OLAR	-Чел	в.		JUP	ITER-C	ICLES.			
														đ	
A. D.	Kali Yuga.		itial ay.	Vik Sam	Intercal Month.	Sak Sal	Init	ial :	Day.	60 Y	ears.	12 Years.	Sapt. Rishi.	Chedi Sam.	
	8									8. Sid.	Tel.		Sapt	Chec	
1441	4542	97	Mar	1498	•••	1363	Fr	24	Mar	<b>24</b> .2	76.55	Bhâd	17	1192	
1442	43	27		1499	•••	1364			Mar	3	56	Aswa		1193	- 1
1443	44	27		1500	Ashad	1365		-	Mar	4	57			1194	
•1444	45	26		1501		1366			Mar	5	58	Agra		1195	
1445	46	27		1502		1367		10	Mar	6	59	Paush		1196	- 1
1446	47	27		1503	Vais	1368			Feb	7	<b>60</b>	Mâgh		1197	
1447	48	27	_	1504		1369	Sa	18	Mar	8	77.1	Phâl		1198	
<b>•1448</b>	49	27		1505	Bhåd	1370			Mar	9	2	Chait		1199	
1449	50	27	_	1506		1371	Th	26	Mar	10	3	Vais		1200	
1450	4551	27	_	1507	•••	1372	s	15	Mar	11	4	Jyesh	26	1201	
											ĺ	-			,
1451	4552	27	Mar	1508	Ashad	1373	Th	4	Mar	12	5	Ashad	27	1202	
<b>*</b> 1452	53	27	_	1509		1374	We	22	Mar	13	6	Srâv	28	1203	
1453	54	27	—	1510		1375	Mo	12	Mar	14	7	Bhâd	29	1204	
1454	55	27	_	1511	Jyesh	1376	Fr	1	Mar	15	8	Aswa	30	120/	
1455	56	27		1512		1377	We	19	Mar	16	9	Kârt	31	120	
*1456	57	27		1513	Kârt	1378	Mo	8	Mar	17	10	Agra	32	17	
1457	58	27	-	1514	•••	1379	S	27	Mar	18	11	Paush	<b>3</b> 3	1	
1458	59	27	-	1515		1380	Th	16	Mar	19	12	Mâgh	34		
1459	60	27		1516	Sráv	1381	Mo		Mar	20	13	Phâl	3/		
<b>•</b> 1460	4561	27	-	1517	•••	1382	Mo	24	Mar	21	14	Chait	\$		
													3		
													1 1		
1461	4562	27	Mar	1518		1383	Fr	13	Mar	22	15	Vais	31		
1462	63	27		1519	Ashad	1384	Tu	2	Mar	23	16	Jyeah	38		
1463	64	27	_	1520	•••	1385	Mo	21	Mar	24	17	Ashad	39		
.*1464	65	27		1521		1386	Sa	10	Mar	25	18	Srâv	40	1	
1465	66	27	_	1522	Chait	1387			Feb	26	19	Bhâd	41	1	
1466	67	27		152 <b>3</b>		1388	We	18	Mar	27	20	Aswa	42	1	
1467	68	27	—	1524	Bhåd	1389	Sa		Mar		21	Kârt	43	1	
*1468	69	27	-	1525	•••	1390			Mar		22	Agra	44	11	
1469	70	27		1526	•••	1391	We				23	Paush		12	
1470	4571	27		1527	Ashad	1392	s	4	Mar	24.31	77.24	Mâgh	46	12	

A 2/

	SOLAR	-YE	AR.		LUNI-S	OLAB	-YE	AB.		JUPI	TEB-C	YCLES.		
A. D.	Kali	Ini	itial	Vik	Intercal	Sak	Tell	1.1	Day.	60 Ye	ars.	12	Rishi.	Sam.
	Yuga.	D	ay.	Sam	Month.	Sal.	Int	181	Day.	S. Sid.	Tel.	Years.	Sapt.	Chedi Sam.
1471	4572	27	Mar	1528		1393	Fr	22	Mar	24.32	77.25	Phål	47	1222
*1472	73	27	_	1529		1394	We	11	Mar	33	26	Chait	48	1223
1473	74	27	_	1530	Jyesh	1395	s	28	Feb	34	27	Vais	49	1224
1474	75	27	-	1531		1396	Sa	19	Mar	35	28	Jyesh	50	1225
1475	76	27	-	1532	Aswa	1397	We	8	Mar	36	29	Ashad	51	1226
*1476	77	27	-	1533		1398	We	27	Mar	37	30	Srâv	52	1227
1477	78	27	-	1534		1399	S	16	Mar	38	31	Bhâd	53	1228
1478	79	27	-	1535	Srâv	1400	Th	5	Mar	39	32	Aswa	54	1229
1479	80	27	-	1536		1401	We	24	Mar	40	33	Kârt	55	1230
*1480	4581	27	-	1537		1402	Mo	13	Mar	41	34	Agra	56	1231
1481	4582	97	Mar	1538	Ashad	1403	Fr	2	Mar	42	35	Paush	57	1232
1482	83	27		1539		1404	1.00		Mar	43	36	Mågh	1.0	1233
1483	84	28		1540		1405	1.00		Mar		37	Phâl	1.27	1234
*1484	85	20		1541	Chait	1406	1.000		Feb	45	38			1235
1485	86	27		1542		1407	1		Mar	46	39	10701	1100	1236
1486	87	27		1543	Srâv	1408		100	Mar	47	40			1237
1487	88	28		1544	····	1409			Mar		41	Ashad	1	1238
*1488	89	27		1545		1410	122.25		Mar		42	Srav		1239
1489	90	27		1546	Ashad	1411	10.0		Mar		43	Bhâd		1240
1490	4591	27		1547		1412	Mo		Mar		44	Aswa	66	1241
1491	4592	99	Mar	1548		1413	Sa	19	Mar	52	45	Kårt	67	1242
*1492	93	20		1549		1414	1.000		Feb	53	46	1.2.2		1243
1493	94	27	12	1550		1415			Mar		47	Paush		1244
1494	95	28	1	1551	Bhâd	1416	1.2.2	- 89	Mar	1	48	Mägh	1.00	1245
1495	96			1452		1417	120		Mar		49	110000	1.0	1246
*1496	97			1553			1.00		Mar		50		1.1.1.1.1.1.1	1247
1497	98			1554		1419			Mar		51	Vais	1 0 1 1	1248
1498	99			1555		1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	Sa		Mar		52	1 m 1 1 1 1 1		1249
1499	4600		_	1556		1.1	1.1.1		Mar	1.1.1	53	A COMPANY OF A		1250
*1500	4601		_	1557			Mo		Mar			Bhâd		1251

# General Table of Corresponding Dates.

	SOLAR	-YI	EAR.		LUNI-Se	DLAR-	YEAR.		JUPI	FER-CY	CLES.	17	
A. D.	Kali	_	itial	Vik	- se bos otes	Sak	Initial	Day.	60 Y	ears.	.12	Sapt. Rishi.	Chedì Sam.
	Yuga.	D	ay.	Sam	Month.	Sal.		zay.	S. Sid.	Tel.	Years.	Sapt.	Ched
1501	4602	27	Mar	1558		1423	Sa 20	Mar	25. 3	77.55	Aswa	77	1252
1502	03	27	-	1559		1424		Mar	4	56	Kârt		1253
1503	04	28	1	1560	Chait	1425	Mo 27	Feb	5	57	Agra		1254
*1504	05	27	1	1561		1426	S 17	Mar	6	58	Paush	80	1255
1505	06	27	1	1562	Srâv	1427	Th 6	Mar	7	59	Mâgh	81	1256
1506	07	27	-	1563		1428	We 25	Mar	8	60	Phâl	82	1257
1507	08	28	-	1564		1429	Mo 15	Mar	9	78. 1	Chait	83	1258
*1508	09	27	2	1565	Ashad	1430	Fr 3	Mar	10	2	Vais	84	1259
1509	10	27	-	1566		1431	Th 22	Mar	11	3	Jyesh	85	1260
1510	4611	27	-	1567	- <b></b> 1	1432	Mo 11	Mar	12	4	Ashad	86	1261
1511	4612	28	Mar	1568	Vais	1433	Sn 1	Mar	13	5	Srâv	87	1262
*1512	13	27	-	1569		1434	Fr 19	Mar	14	6	Bhåd	88	1263
1513	14	27	_	1570	Bhâd	1435	Tu 8	Mar	15	7	Aswa	89	1264
1514	15	28	-	1571		1436		Mar	16	8	Kârt	90	1265
1515	16	28	-	1572		1437	Fr 16	Mar	17	9	Agra	91	1266
*1516	17	27	-	1573	Srâv	1438	We 5	Mar	18	10	Paush	92	1267
1517	18	27	-	1574		1439	Mo 23	Mar	19	11	Mâgh	93	1268
1518	19	27	-	1575		1440	Fr 12	Mar	20	12	Phâl	94	1269
1519	20	28	-	1576	Jyesh	1441	We 2	Mar	21	13	Chait	95	1270
*1520	4621	27	-	1577		1442	Tu 20	Mar	22	14	Vais	96	1271
1521	4622	27	Mar	1578	t	1443	Sa 9	Mar	23	15	Jyesh	97	1272
1522	23	28	-	1579	Vais	1444	Th 27	Feb	24	16	Ashad	98	1273
1523	24	28	-	1580		1445	We 18	Mar	25	17	Srâv	99	1274
*1524	25	27	-	1581	Bhád	1446	S 6	Mar	26	18	Bhåd	100	1275
1525	26	27	-	1582		1447	Sa 25	Mar	27	19	Aswa	1	1276
1526	27	28	-	1583		1448	Th 15	Mar	28	20	Kårt	2	1277
1527	28	28	-	1584	Ashad	1449	Mo 4	Mar	29	21	Agra	3	1278
*1528	29	27	-	1585		1450	S 22	Mar	30	22	Paush	4	1279
1529	30	27	÷	1586		1451	Th 11	Mar	31	23	Mâgh	5	1280
1530	4631	28	_	1587	Vais	1452	Mo 28	Feb	25.32	78.24	Phâl	6	1281

† Kârtika omitted, and Kârtika intercalary.

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#### TABLE XVII.-(Continued.)

	SOLAI	a-YI	EAR.		LUNI-S	OLAI	-YEAI	z.	JUP	ITER-C	YCLES.			
	Kali	In	itial	Vik	Intercal	Sak	Talt	l Day.		ears.	12	Rishi.	Sam.	
A. D.	Yuga.	D	ay.	Sam	Month.	Sal.	Inters	a Day.	S. Sid.	Tel.	Years.	Sapt.	Chedi	Fasli.
1531	4632	28	Mar	1588	1	1453	S 19	Mar	25.33	78.25	Chait	7	1282	
*1532	33	27	_	1589	Bhåd	1454	Fr 8	Mar	34	26	Vais	8	1283	
1533	34	27	-	1590		1455	We 2	6 Mar	35	27	Jyesh	9	1284	
1534	35	28	$\square$	1591		1456	Mo 10	Mar	36	28	Ashad	10	1285	
1535	36	28	_	1592	Sråv	1457	Fr a	Mar	37	29	Srâv	11	1286	Ľ
*1536	37	27	-	1593		1458	Th 23	Mar	38	30	Bhåd	12	1287	
1537	38	28	_	1594		1459	Ta 13	Mar	39	31	Aswa	13	1288	
1538	39	28	_	1595	Jyesh	1460	Sa :	2 Mar	40	32	Kårt	14	1289	
1539	40	28		1596		1461	Fr 21	Mar	41	33	Agra	15	1290	
*1540	4641	27	-	1597	t	1462	Tu s	) Mar	42	34	Paush	16	1291	
1541	4642	00	Mar	1500	Chait	1463	9 0	7 Feb	43		Mâgh	17	1292	
1542	4042	28	Mar	1599		1464	100.0		44	35	Phâl	18	1293	
1543	44	20		1600	Sråv	1465			45	30	Chait	19	1294	
*1544	45	20		1601	Stav	1466		5 Mar	46	38	Vais	20	1295	
1545	46	28		1602		1467		5 Mar	47	39	Jyesh	21	1296	
1546	47	28		1603	Ashâd	1468		Mar	48	40	Ashad	22	1297	1
1547	48	28		1604		1469	We 2		49	41	Srâv	23	1298	
*1548	49	27	2	1605		1470	S 11		50	42	Bhâd	24	1299	
1549	50	28	1	1606	Vais	1471		Mar	51	43	Aswa	25	1300	E
1550	4651	28	4	1607		1472		) Mar	52	44	Kårt	26	1301	
1551	4652	28	Mar	1608	Bhåd	1473	S	8 Mar	53	45	Agra	27	1302	
*1552	53	27	-	1609		1474	Sa 2	6 Mar	54	46	Paush	28	1303	
1553	54	28		1610		1475	Th 10	6 Mar	55	47	Mågh	29	1304	
1554	55	28	-	1611	Ashad	1476	Mo 5	Mar	56	48	Phâl	30	1305	
1555	56	28		1612		1477	S 2	Mar	57	49	Chait	31	1306	96
*1556	57	27	-	1613		1478	Th 1:	2 Mar	58	50	Vais	32	1307	96
1557	58	28	-	1614	Jyesh	1479	Tu :	2 Mar	59	51	Jyesh	33	1308	96
1558	59	28	-	1615		1480	Mo 21	Mar	60	52	Ashad	34	1309	96
1559	60	28	-	1616	Aswa	1481	Fr 10	) Mar	1	53	Srâv	35	1310	96
*1560	4661	27	-	1617		1482	We 27	Mar	26. 2	78.54	Bhåd	36	1311	96

# General Table of Corresponding Dates.

† Pausha omitted, and Aswina intercalary.

### GENERAL TABLE OF CORRESPONDING DATES.

#### TABLE XVII.-(Continued.)

	SOLAI	a-Yı	EAR.		LUNI-S	OLAR	-YE	R.		JUP	TER-CY	TCLES.			
A. D.	Kali		itial	Vik.	Intercal		Init	inl	Day.	60 Y	ears.	12	Rishi.	Chedi Sam.	
	Yuga,	D	ay.	Sam	Month.	Sal.	im	tai	Day.	S. Sid.	Tel.	Years.	Sapt.	Ched	Fasli.
1561	4662	28	Mar	1618		1483	Tu	18	Mar	26. 3	78.55	Aswa	37	1312	96
1562	63	28	-	1619	Sråv	1484	10.2	7	Mar	4	56	Kârt	38	1313	97
1563	64	28	-	1620		1485		25	Mar	5	57	Agra	39	1314	97
*1564	65	28	_	1621		1486	1.000		Mar	6	58	Paush	40	1315	97
1565	66	28	_	1622	Ashad	1487	Sa		Mar	7	59	Màgh	41	1316	97
1566	67	28	_	1623		1488	1.000		Mar	8	60	Phâl	42	1317	97
1567	68	28	-	1624		1489	Tu		Mar	9	79. 1	Chait	43	1318	97
*1568	69	28	-	1625	Vais	1420		-97	Feb	10	2	Vais	44	1319	97
1569	70	28	_	1626		1491	Sa		Mar	11	3	Jyesh	45	1320	97
1570	4671	28	-	1627	Bhåd	1492			Mar	12	4	Ashad	46	1321	97
1571	4672	28	Mar	1628		1493	Tu	97	Mar	13	5	Sråv	47	1322	971
*1572	73	28	_	1629		1494	S		Mar	14	6	Bhåd	48	1323	98
1573	74	28	12	1630	Ashad	1495	1.5		Mar	15	7	Aswa		1324	98
1574	75	28	-	1631		1496			Mar		8	Kårt	50	1325	98
1575	76	28	1	1632		1497	s		Mar	17	9	Agra	1.00	1326	98
*1576	77	28	14	1633	Jyesh	1498	Fr		Mar		10	Paush	52	1327	98
1577	78	28	_	1634		1499	1.11		Mar	19	11	Mägh	53	1328	98
1578	79	28		1635	Aswa	1500			Mar	20	12	Phál	54	1329	98
1579	80	28	-	1636		1501	Sa	12.2	Mar	21	13	Chait	55	1330	98
*1580	4681	28	-	1637		1502			Mar		14	Vais	56	1331	988
1581	4682	28	Mar	1638	Srâv	1503	Мо	6	Mar	23	15	Jyesh	57	1332	989
1582	83	28	_	1639		1504	S	1.1	Mar		16	Ashad		1333	990
1583	84	28	-	1640		1505		6.7	Mar	25	17	Sråv	59	1334	99)
*1584	85	28	-	1641	Ashad	1506	Tu	123	Mar	26	18	Bhåd	60	1335	99:
1585	86	28	-	1642		1507	Mo	100	Mar	028	19	• Kårt		1336	993
1586	87	28	-	1643		1508	Fr	120	Mar	29	20	Agra	62	1337	99
1587	88	28	-	1644	Vais	1509	Tu		Feb	30	21	Paush	63	1338	99
*1588	89	28	1	1645		1510	1.1	100	Mar	31	22	Mâgh		1339	99
1589	90	28	-	1646	Bhâd	1511	Sa		Mar	32	23	Phâl	1.20	1340	99
1590	4691	28	-	1647		1512	Fr		Mar	26.33	79.24	Chait	1.1	1341	998

#### SOLAR-YEAR. LUNI-SOLAR-YEAR. JUPITER-CYCLES. Sapt. Rishi. Chedi Sam. 60 Years. Kali Initial Vik Intercal Sak 12 A. D. Initial Day. Yuga. Sam Month Day. Sal. Years. Fasli. S. Sid. Tel. 1591 4692 28 Mar 1648 26.34 79.25 Vais 1342 999 .... 1513 Tu 16 Mar 67 28 \*1592 93 1649 Ashad 1514 S 5 Mar 35 26 Jyesh 68 1343 1000 94 1593 28 1650 Fr 23 Mar 36 27 Ashad 1344 1001 1515 69 .... 1594 95 28 -1651 1516 Tu 12 Mar 37 28 Sràv 1345 1002 70 .... 1595 28 96 38 Bhåd 1346 1003 -1652 1517 S 2 Mar 29 Jyesh 71 \*1596 97 28 1653 Sa 20 Mar 39 30 Aswa 72 1347 1004 -1518 .... 1597 28 Kart 1348 1005 98 1654 1519 We Mar 40 31 Aswa 9 73 1598 99 28 1655 1520 Tu 28 Mar 41 32 Agra 74 1349 1006 1.44 1599 4700 29 1656 1521 S 18 Mar 42 33 Paush 1350 1007 75 .... \*1600 4701 28 1657 Srav 1522 Th 6 Mar 43 34 Mägh 76 1351 1008 -1601 1352 1009 4702 28 Mar 1658 1523 We 25 Mar 44 35 Phâl 77 1.12 1602 28 1353 1010 03 1659 1524 s 14 Mar 36 Chait 78 \_ ... 45 1603 04 29 Vais 79 1354 1011 1660 Ashad 1525 Fr 4 Mar 46 37 \*1604 28 Jyesh 1355,1012 05 1661 1526 Th 22 Mar 80 47 38 -... 1605 28 1356 1013 06 1662 1527 Mo 11 Mar Ashad 81 .... 48 39 -1357 1014 1606 07 28 Chait 1528 Fr 28 Feb Srâv 1663 49 40 82 1607 1358,1015 08 29 1664 .... 1529 Fr 20 Mar 50 41 Bhad 83 \*1608 1359 1016 09 28 1665 Bhâd 1530 Tu 8 Mar 51 42 Aswa 84 -1609 28 1531 S 26 Mar Kârt 85 1360 1017 10 -1666 5243 ... 1610 4711 1532 Th 15 Mar 1361 1018 28 53 Agra 86 1667 44 -... 1611 1362 1019 29 Mar 1668 1533 We 6 Mar Paush 87 4712 Ashad 54 45 1363 1020 \*1612 13 28 1669 1534 Mo 23 Mar 55 46 Màgh 88 -... 1364 1021 1613 28 1670 1535 Fr 12 Mar 56 47 Phâl 89 14 -.... 1365 1022 1614 Jyesh 1536 Tu Mar 48 Chait 90 15 28 1671 1 57 -Vàis 1366 1023 1615 29 1672 1537 Tu 21 Mar 58 49 91 16 ... \*1616 1367 1024 Mar Jyesh 92 28 1673 Aswa 1538 Sa 9 59 50 17 1617 1368 1025 28 1674 1539 Fr 28 Mar 60 51 Ashad 93 18 ... 1618 Srav 1369 1026 19 28 1675 1540 Tu 17 Mar 27. 1 52 94 \_ ... 1619 20 29 1676 Srâv 1541 S 7 Mar 2 53 Bhåd 95 1370 1027 -\*1620 96 1371 1028 4721 28 1677 1542 Sa 25 Mar 3 79.54 Aswa ....

	SOLAR	-Y1	CAB.	8	LUNI-S	OLAR	YEAR.	JUP	ITER-CY	CLES.	shi.	'n.	
	Kali		itial	Vik	Intercal		Initial Da		ears.	12	Sapt. Rishi.	Chedi Sam.	
A. D.	Yuga.	D	ay.	Sam	Month.	Sal.	initial Da	S. Sid	Tel.	Years.	Sap	Che	Fasli.
1621	4722	28	Mar	1678		1543	We 14 Ma	r 27.4	79.55	Kârt	97	1372	102
1622	23	29	_	1679	Ashad	1544	Mo 4 Ma	1000	1 20 201	Agra	1.00	1373	1.1.1.1
1623	24	29	-	1680		1545	Sa 22 Ma			Paush	1.1	1374	1.1.1.1
*1624	25	28	-	1681		1546	S 11 Ma		1	Mâgh	1.00	1375	1
1625	26	28	12	1682	Chait	1547	Mo 28 Fe			Phál	1000	1376	100
1626	27	29	-	1683		1548		2		Chait		1377	1.00
1627	28	29	-	1684	Srâv	1549	Th 8 Ma			Vais		1378	1.000
*1628	29	28	-	1685		1550			2	Jyesh		1379	1
1629	30	28	1	1686		1551	S 15 Ma			Ashad		1380	1.1.1
1630	4731	29	_	1687	Ashad	1552	Fr 5 Ma			Srâv		1381	100
1631	4732	29	Mar	1688		1553	Th 24 Ma	r 14	5	Bhâd	7	1382	103
*1632	33	28	-	1689		1554	Mo 12 Ma	r 15	6	Aswa	8	1383	104
1633	34	28	-	1690	Vais	1555	Fr 1 Ma	r 16	7	Kårt	9	1384	104
1634	35	29	-	1691		1556	Fr 21 Ma	r 17	8	Agra	10	1385	104
1635	36	29	-	1692	Bhâd	1557	Tu 10 Ma	r 18	9	Paush	11	1386	104
*1636	37	28	-	1693		1558	Mo 28 Ma	r 19	10	Mâgh	12	1387	104
1637	38	28	-	1694		1559	Fr 17 Ma	r 20	11	Phâl	13	1388	104
1638	39	29	-	1695	Sråv	1560	We 7 Ma	r 21	12	Chait	14	1389	104
1639	40	29	-	1696		1561	Mo 25 Ma	r   22	13	Vais	15	1390	104
*1640	4741.	28	-	1697		1562	Fr 13 Ma	r 23	14	Jyesh	16	1391	104
1641	4742	28	Mar	1698	Jyesh	1563	We 3 Ma	r 24	15	Ashad	17	1392	104
1642	43	29		1699		1564	Tu 22 Ma			Sråv		1393	1
1643	44	29	-	1700		1565	100 100 100			Bhåd		1394	
*1644	45	28	1	1701	Chait	1566			1 1 1	Aswa	1.01	1395	
1645	46	28	_	1702		1567	Tu 18 Ma			Kårt		1396	1.1
1646	47	29	-	1703		1568				Agra		1397	1 m m
1647	48	29	-	1704		1569			K	Paush		1398	
*1648	49		-	1705		1570				Mågh	1 - C	1399	
1649	50	28	-	1706	Ashad	1571	S 4 Ma		1	Phâl		1400	
1650	4751	29	-	1707		1572			80.24	Chait		1401	

	SOLAT	-Y1	EAR.		LUNI-S	OLAR	YEA	B.	24	JUP	TER-CI	CLES.		ł
<b>A</b> . D.	Kali Yuga.		itial ay.		Intercal Month.	Sak Sal.	Init	ial	Day.	60 Y	ears.	12 Years.	Rishi.	Chedi Sam.
	r uga.		ay.	Sam	Month.	Can.	-			S. Sid.	Tel.	T CHI D.	Sapt.	Chodi
1651	4752	29	W	1		1573	101	19	Mar	97 34	80.25	Vais	0-	140210
*1652	53	28	Mar	1708	Vais	1574			Mar	35	26	Jyesh	1.1.1.1	1403 10
1653	54	20				1575			Mar	36	27	Ashad	10.00	1404 10
1654	55	29	121	1710	Bhâ.l	1576			Mar	37	28	Srav	1.5.5	1405 10
1655	56	29				1577	We		Mar	38	29	Bhad	1000	1406 10
*1656	57	28	. 31	1712		1578			Mar	39	30	Aswa	1.1.1	1407 10
1637	58	29		1714	Srav	1579			Mar	40	31	Kart	199	1406 10
1658	39	29		1715		1580	-		Mar	41	32	Agra	1.11	1409 10
1659	60	29	12	1716		1581			Mar	42	33	Paush	1.50	1410.10
*1660	4761	100		1717		1582			Mar	43	34	Magh	11.25	1411 10
	1.0.	-0		1.1.	ayesu	1	r.	-	mar		1	ange		
											1	1-6-1	1	
1661	4762	29	Mar	1718		1583	Fr	29	Mar	44	35	Phâl	37	1412 10
1662	63	29	_	1719		1384			Mar	45	36	Chait		141310
1663	64	29	_	1720	Chait	1585	100		Feb	46	37	Vais	39	1414 10
•1664	65	28	-	1721		1386			Mar	47	38	Jyesh	1.65	1415,10
1665	66	29		17-09	Srav	1587			Mar	48	39	Ashad	1.2.2	141610
1666	67	29	-	1723		1588	Tu		Mar	49	40	Srav	42	1417'10
1667	65	29	-	1724		1389	Sa		Mar	50	41	Bhåd	43	1418 10
•1668	69	28	1	1725	Ashad	1390	-		Mar	51	42	Aswa	44	141910
1669	70	29	-	1726		1391			Mar	52	43	Kart	1.1	142010
1670	4771	29	_	1727		1392	Sa	12	Mar	054	44	Paush	46	142110
						1				1.1			13	ii
1671	4772	29	v			1393	W.		v			NP -1		142210
*1672	1012	22		1725	Vais	1594			Mar Mar		45	Mágh Phál		1423 10
1673	74	29		10000	Bhad	1594	_		Mar	56		1000	1.10	0.00
1674	73	33		1730		1396		-	-	57	47	Chait Vais		1424 10
1673	10	29		1731	***	1597	1.5		Mar Mar	58 59	45	100 100		1425 H
*1676	10	12		1733	Sràv	1595	1.1		Mar	60	49	Jyesh Ashad	1.1.1	1420 10
1677	75	29		1734	0.00	1599			.Mar Mar	28.1	51	1000	10.00	
1678	1.1.1	39		1733		16.0			Mar	28.1		Srav		1428,10
1679		22		1736	Trut	10.0			Mar		52	Bhad		1429 1
*1680	4781			1737	Jyesh	1602			Mar	3	53 80,54	Aswa Kart	1.00	1430 1
1000	1101	*9	-	21.31		100-	9	-1	Juar	1 1	00.51	DALL	20	1431 1

	SOLAI	3-YEAB.		LUNI-S	OLAR	-Ye/	AB.		JUPI	TER-CT	CLES.			
A. D.	Kali	Initial		Intercal	Sak	Inii	fal	Day.	60 Y	ears.	12	Sapt. Rishi.	Chedi Sam.	
	Yuga.	Day.	Sam	Month.	Sal.			Day.	8. Sid.	Tel.	Years.	Sapt.	Chedi	Fasli.
<b>†</b> 1681	4782	29 Mar	1738	Bhâd	1603	Fr	11	Mar	28. 5	80.55	Agra	57	1432	1089
1682	83	29 —	1739		1604	We	29	Mar	6	56	Paush	58	1433	1090
1683	8 <del>1</del>	29 —	1740		1605	Mo	19	Mar	7	57	Mâgh	59	1434	1091
<b>*</b> 1684	85	29 —	1741	Srâv	1606	8a	8	Mar	8	58	Phâl	60	1435	1092
1685	86	29 —	1742	•••	1607	Th	26	Mar	9	59	Chait			1093
1686	87	29 —	1743		1608	Mo	15	Mar	10	60	Vais			1094
1687	88	29 —	1744	Ashad	1609	Sa	-	Mar	11	81. 1	Jyesh			1095
•1688	89	29 —	1745		1610	Fr	23	Mar	12	2	Ashad			1096
1689	90	29 —	1746		1611	Tu	12	Mar	13	3	Srâv			1097
1690	4791	29 —	1747	Vais	1612	Sa	1	Mar	14	4	Bhâd	66	1441	1098
1691	4792	29 Mar	1748		1613	Fr	20	Mar	15	5	Aswa	67	1442	1099
•1692	93	29 —	1749	Bhâd	1614	We	9	Mar	16	6	Kârt	68	1443	1100
1693	94	29 —	1750		1615			Mar	17	7	Адта	69	1444	1101
1694	95	29 —	1751		1616	Sa	17	Mar	18	8	Paush	70	1445	1102
1695	96	29 —	1752	Ashad	1617	We	6	Mar	19	9	Mâgh	71	1446	1103
<b>*</b> 1696	97	29 —	1753		1618	We	25	Mar	20	10	Phâl			1104
1697	98	29 —	1754		1619	S	14	Mar	21	11	Chait	73	1448	1105
1698	99	29 —	1755		1620	Th	3	Mar	22	12	Vais			1106
1699	4800	29	1756		1621	We	22	Mar	23	13	Jyesh			1107
<b>*</b> 1700	4801	29 —	1757	Aswa	1622	Mo	11	Mar	24	14	Ashad			1108
1701	4802	29 Mar	1758	•••	1623	Sa	29	Mar	25	15	Srâv	77	1452	1109
1702	03	29 —	1759		1624			Mar	26	16	Bhad			1110
1703	01	29 —	1760	1	1625		7	Mar	27	17	Aswa			1111
<b>•</b> 170 <del>4</del>	05		1761		1626	-	26	Mar	28	18	Kârt			1112
1705	06	29 —	1762	1				Mar	29	19	Agra			1113
1706	07	29 —	1763		1628			Mar	30	20	Paush			1114
1707	08	29 —	1764		1629		23	Mar	31	21	Mâgh			1115
<b>•</b> 1708	09	29	1765		1630		12	Mar	32	22	Phâl			1116
1709	4810	29 —	1766		1631		1	Mar	33	23	Chait			1117
1710	4811	29	1767		1632		20	Mar	<b>2</b> 8.34	81.24	Vais			1118
			1			_			<u> </u>	L		-		1

# General Table of Corresponding Dates.

† Agrahayana omitted, and Bhådrapada intercalary.

## GENERAL TABLE OF CORRESPONDING DATES.

## TABLE XVII.-(Continued.)

# General Table of Corresponding Dates.

	SOLAT	B-YEAR.		LUNI-S	OLAR	-YE	R.		JUPI	TER-CY	CLES.		1.1	
A. D.	Kali	Initial	Vik	Intercal	Sak	Tali	inl	Day.	60 Y	ears.	12	Rishi.	Sam.	
	Yuga.	Day.	Sam	Month.	Sal.	THE	Jai	Day.	S, Sid.	Tel.	Years.	Sapt. ]	Chedi Sam.	Fasli.
1711	4812	30 Mar	1768	Bhâd	1633	Sa	10	Mar	28.35	81.25	Jyesh	87	1462	111
•1712	13	29 -	1769		1634	Fr	28	Mar	36	26	Ashad	88	1463	112
1713	14	29 -	1770		1635	Tu	17	Mar	37	27	Srâv	89	1464	112
1714	15	29 -	1771	Ashad	1636	Sa	6	Mar	38	28	Bhåd	90	1465	115
1715	16	30 -	1772		1637	Fr	25	Mar	39	29	Aswa	91	1466	11:
*1716	17	29	1773		1638	We	14	Mar	40	30	Kårt	92	1467	115
1717	18	29 —	1774	Jyesh	1639	S	3	Mar	41	31	Agra	93	1468	115
1718	19	29 -	1775		1640	Fr	21	Mar	42	32	Paush	94	1469	11:
1719	20	30 -	1776	Aswa	1641	We	11	Mar	43	33	Mågh	95	1470	11
*1720	4821	29 —	1777		1642	Tu	29	Mar	44	34	Phâl	96	1471	11:
1721	4822	29 Mar	1778		1643	Sa	18	Mar	45	35	Chait	97	1472	11
1722	23	29 -	1779	Srâv	1644	We	7	Mar	46	36	Vais	98	1473	11
1723	24	30 -	1780		1645	We	27	Mar	47	37	Jyesh		1474	1.1
*1724	25	29 -	1781		1646	S	15	Mar	48	38	Ashad	100	1475	11
1725	26	29 -	1782	Ashad	1647	Th	4	Mar	49	39	Srâv	1	1476	11
1726	27	29 -	1783		1648	We	23	Mar	50	40	Bhåd	2	1477	11
1727	28	30 -	1784		1649	Mo		Mar	51	41	Aswa	3	1478	11
*1728	29	29 -	1785	Vais	1650	Fr	1	Mar	52	42	Kârt		7479	1
1729	30	29 -	1786		1651	Th	20	Mar	53	43	Agra	5	1480	11
1730	4831	29 —	1787	Bhâd	1652	Мо	9	Mar	54	44	Paush	6	1481	11
1731	4832	30 Mar	1788		1653	S	28	Mar	55	45	Mâgh	7	1482	11
*1732	33	29 -	1789		1654	Fr		Mar	56	46	Phâl		1483	1
1733	34	29 -	1790	Ashad	1655	Tu	6	Mar	57	47	Chait	1.1.2	1484	1.
1734	35	29 -	1791		1656	s	24	Mar	58	48	Vais	10	1485	11
1735	36	29 -	1792		1657	Th	13	Mar	59	49	Jyesh	11	1486	11
*1736	37	29 -	1793	Jyesh	1658	Tu	2	Mar	60	50	Ashad	12	1487	11
1737	38	29 —	1794		1659	Mo	21	Mar	29. 1	51	Srâv	13	1488	11
1738	39	30 -	1795	Aswa	1660	Sa	11	Mar	2	52	Bhâd	14	1489	11
1739	40	30 -	1796		1661	Fr	30	Mar	3	53	Aswa	15	1490	11
*1740	4841	29 -	1797		1662	Tu	18	Mar	4	81.54	Kârt	16	1491	11

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## General Table of Corresponding Dates.

	SOLAT	a-YI	CAR.		LUNI-S	OLAR	YEAR.		JUPI	TER-CY	CLES.	shi.	'n.	
	Kali	In	itial	Vik	Intercal	Sak	Initial	Dar	60 Y	ears.	12	Sapt. Rishi.	Chedi Sam.	II.
A. D.	Yuga.		ay.		Month.	Sal.	Intelat	Day.	S. Sid	Tel.	Years.	Sal	Che	Fasli.
1741	4842	29	Mar	1798	Srâv	1663	Sa 7	Mar	29. 5	81.55	Agra	17	1492	1149
1742	43		_	1799		1664	Sa 27	Mar	6	56	Paush	18	1493	1150
1743	44	30	1	1800		1665	We 16	Mar	7	57	Mågh	19	1494	1151
*1744	45	29	-	1801	Ashad	1666	S 4	Mar	8	58	Phâl	20	1495	115
1745	46	29	-	1802		1667	Sa 23	Mar	9	59	Chait	21	1496	115
1746	47	30	-	1803		1668	Th 13	Mar	10	60	Vais	22	1497	115
1747	48	30	_	1804	Chait	1669	Mo 2	Mar	11	82. 1	Jyesh	23	1498	115
*1748	49	29	1	1805		1670			12	2	Ashad	24	1499	115
1749	50	29	1	1806	Bhad	1671	Th 9		13	3	Srâv	25	1500	1157
1750	4851	30	-	1807	•••	1672	We 28	Mar	14	4	Bhâd	26	1501	1158
1751	4852	30	Mar	1808		1673	S 17	Mar	15	5	Aswa	27	1502	1159
0.S.1752*	53	100		1809		1674	Th 5	Mar	16	6	Kârt	28	1503	116
N·S·1753	54			1810		1675	We 4	Apr	17	7	Agra	29	1504	116
1754	55	1.2		1811		1676			18	8	Paush	30	1505	116
1755	56			1812		1677	Fr 14	Mar	• 20	9	• Phål	31	1506	116
•1756	57	9		1813	o Janes	1678			21	10	Chait	32	1507	116
1757	58	9		1814	Aswa	1679			22	11	Vais	33	1508	116
1758	59	10		1815		1680	S 9	Apr	23	12	Jyesh	34	1509	116
1759	60			1816		1681	Fr 30	0.0	24	13	Ashad	35	1510	116
*1760	4861	9		1817	Srâv	1682	Tu 18	Mar	25	14	Sråv	36	1511	116
1761	4862	10	Apr	1818		1683	Fr 6	Apr	26	15	Bhâd	37	1512	116
1762	63			1819		1684	Sa 27		27	16	Aswa	38	1513	117
1763	64	10		1820		1685	We 16		28	17	Kårt	39	1514	117
*1764	65	.0	1	1821	o yosu	1686	Mo 2		29	18	Agra	40	1515	117:
1765	66	10	1	1822		1687	Sa 23		30	19	Paush		1516	1.0.00
1766	67	10		1823	Chait	1688			31	20	Màgh	42	1517	117
1767	68			1824	····	1689	Tu 31		32	21	Phå1	43	1518	1170
*1768	69			1825		1690	Fr 19		33	22	Chait	44	1519	1170
1769	70			1826		1691	Sa 8		34	23	Vais	45	1520	1177
1770	4871	10		1827		1692	We 23		29.35	82.24	Jyesh	46	1521	1178

N.B.-New style is used from 1753 onwards.

	SOLAT	a-Ye	AR.		LUNI-S	OLAR	-Yea	B.		JUP	ITEB-C	YCLES.			
A. D.	Kali		tial	Vik	Intercal	Sak	Init	ial	Day.	60 Y	ears.	12	Rishi.	Sam.	
	Yuga.	D	ву.	Sam	Month.	Sal.			Day.	S. Sid.	Tel.	Yеагь.	Sapt.	Chedi	Fauli.
								_							
1771 •1772	4872		-	1828		1693			Mar	<b>29</b> .36 37				1522 1523	
-1772	73 74	9		1829	•••	1694	Т <b>h</b> Тh	-	Mar	37 38	26 27	Srâv Bhâd		1525 1524	
1774	75	10 10		1830 1831	•••• •••	1695 1696			Mar Mar		27 28	Aswa		1525	
1775	76	10		1831	Vais	1690	мо S		Apr	40	28 29	Aswa Kârt		1526	
+1776	77	10 9		1833	 Bhâd	1698	S Th		Mar	41	30	Agra		1627	
1777	78	9 10		1834		1699	We		Apr	42	31	Paush		1528	
1778	79	10	_	1835	•••	1700	Mo		Mar	43	32	Mâgh		1529	
1779	80	10		1836	Srâv	1701	Fr		Mar	44	33	Phâl		1530	
*1780	4881	9	_	1837		1702	We		Apr	45	34	Chait	56	1531	1189
		•						•	<b>P</b> -		0.	0			
1781	4882	10	Anr	1838		1703	Mo	26	Mar	46	35	Vais	57	1532	1189
1782	83	10		1839	 Jyesh	1704	Fr		Mar	47	36	Jyesh	1 1	1533	. 1
1783	84	10		1840		1705		_	Apr	48	37	Ashad	59	1534	1191
*1784	85	9		1841		1706			Mar	49	38	Srâv	60	1535	1192
1785	86	10	-	1842	 Chait	1707	Sa		Mar	50	39	Bhâd	61	1536	1193
1786	87	10		1843		1708	Fr		Mar	51	40	Aswa	62	1537	1194
1787	<b>8</b> 8	10		1844	Srâv	1709	_		Mar	52	41	Kârt	63	1538	1195
*1788	89	10	_	1845		1710			Apr	58	42	Agra	64	1539	1196
1789	90	10	_	1846		1711	Sa		Mar	54	43	Paush	65	1540	1197
1790	4891	10		1847	Ashad	1712	We	17	Mar	55	44	Mâgh	66	1541	1198
												0			
1791	4892	10	Anr	1848	•••	1713	Tu	5	Apr	56	45	Phâl	67	1542	1199
*1792	93	9		1849		1714	Sa		Mar	57	46	Chait	68	1543	1200
1793	94	10		1850	Vais	1715	Th		Mar	58	47:	Vais	69	1544	1201
1794	95	10		1851		1716			Apr	59	48	Jyesh	70	1545	1202
1795	96	10	_	1852	Bhâd	1717	S		Mar	60	49	Ashad	71	1546	1203
<b>*</b> 1796	97	10	_	1853		1718	Sa		Apr	30. 1	50	Srâv	72	1547	1204
1797	98	10		1854	•••	1719	We		Mar	2	51	Bhâd	i	1548	
1798	99	10	_	1855	Srâv	1720	s		Mar	- 3	52	Aswa	74	1549	1206
1799	4900	10	-	1856	•••	1721	Sa		Apr	4	53	Kârt	75	1550	1207
<b>*</b> 1800	4901	11		1857	•••	1722	Th		Mar	30. s	82.54	Agra	1	1551	
												<b>U</b> • •		ĺ	
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#### GENERAL TABLE OF CORRESPONDING DATES.

#### TABLE XVII.-(Continued.)

# General Table of Corresponding Dates.

	SOLAR	-Yı	AR.		LUNI-S	OLAI	YEAR.	JUP	ITER-CY	CLES.		1
	Kali	Ini	itial	Vik	Intercal	Sak	Initial Day.	60 Y	ears.	12	Rishi.	
A. D.	Yuga.	D	ay.	Sam	Month.	Sal.	findar Day.	S. Sid.	Tel.	Years.	Sapt. Rishi.	Fasli.
1801	4902	11	Apr	1858	Jyesh	1723	Mo 16 Mar	30. 6	82.55	Paush	77	1209
1802	03	11	-	1859		1724	S 4 Apr	7	56	Màgh	78	1210
1803	04	11	-	1860		1725	Th 24 Mar	8	57	Phâl	79	1211
*1804	05	11	-	1861	Chait	1726	Tu 13 Mar	9	58	Chait	80	1212
1805	06	11	-	1862		1727	Mo 1 Apr	10	59	Vais	81	1215
1806	07	11	$\subseteq$	1863	Sråv	1728	Fr 21 Mar	11	60	Jyesh	82	121
1807	08	11	-	1864		1729	Th 9 Apr	12	83. 1	Ashad	13	1211
*1808	09	11	-	1865		1730	Mo 29 Mar	13	2	Srâv	84	1210
1809	10	11	-	1866	Ashad	1731	Sa 18 Mar	14	3	Bhåd	85	1217
1810	4911	11	-	1867		1732	Th 5 Apr	15	4	Aswa	86	1218
1811	4912	11	Apr	1868		1733	Mo 25 Mar	16	D,	Kârt	87	1219
*1812	13	11	_	1869	Vais	1734	Sa 14 Mar	17	6	Agra	88	1220
1813	14	11	-	1870		1735	Fr 2 Apr	18	7	Paush	89	122
1814	15	11	-	1871	Bhåd	1736	Tu 22 Mar	19	8	Mâgh	90	1225
1815	16	11	-	1872		1737	Mo 10 Apr	20	9	Phâl	91	122
*1816	17	11	-	1873		1738	Sa 30 Mar	21	10	Chait	92	122
1817	18	11	-	1874	Srâv	1739	We 19 Mar	22	11.	Vais	93	122
1818	19	11	-	1875		1740	Tu 7 Apr	23	12	Jyesh	94	122
1819	20	11	_	1876		1741	Sa 27 Mar		13	Ashad	95	122
•1820	4921	11	-	1877	Jyesh	1742	Th 16 Mar	25	14	Sráv	96	122
1821	4922	11	Apr	1878		1743	We 4 Apr	26	15	Bhå/l	97	122
1822	23	11	-	1879		1744	S 24 Mar	27	16	Aswa	98	1230
1823	†24	11		1880	Chait	1745	Th 13 Mar	28	17	Kart	99	1231
•1824	25	11	-	1881		1746	We 31 Mar	29	18	Agra	100	123
1825	26	11	-	1882	Srâv	1747	Mo 21 Mar	30	19	Paush	1	123
1826	27	11	-	1883		1748	Sa 8 Apr	31	20	Mägh	2	123
1827	28	.11	-	1884		1749	Th 29 Mar	32	21	Phâl	3	123
*1828	29	11	-	1885	Ashad	1750	Mo 17 Mar	33	22	Chait	- 4	123
1829	30	11	-	1886		1751	S 5 Apr	34	23	Vais	5	123
1830	4931	11	-	1887		1752	Th 25 Mar	30.35	83.24	Jyesh	6	123

† Agrahayana omitted, and Chaitra intercalary.

General	Table	of	Corresponding	Dates.	
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	SOLAT	a-Yı	EAR.		LUNI-Se	DLAR	YEAR.		JUP	TER-CY	CLES.		
	Kali	In	itial	Vik	Intercal	Sak	1.1		60 Y	ears.	12	Rishi.	
A. D.	Yuga.		ay.	Sam	Month.	Sal.	Initia	l Day.	S. Sid.	Tel.	Years.	Sapt 1	Fasli.
1831	4932	12	Apr	1888	Vais	1753	Tu 15	Mar	30.36	83.25	Ashad	7	123
*1832	33	11	-	1889		1754	Mo 2		37	26	Srâv	8	124
1833	34	11		1890	Bhâd	1755	Fr 22	Mar	38	27	Bhâd	9	124
1834	35	11	_	1891		1756		Apr	39	28	Aswa	10	124
1835	36	12	1	1892		1757	Tu 31		40	29	Kårt	11	124
*1836	37	11	-	1893	Ashad	1758	Sa 19	Mar	41	30	Agra	12	124
1837	38	11	_	1894		1759	Fr 7	Apr	42	31	Paush	13	124
1838	39	11	_	1895		1760	Tu 27		43	32	Mâgh	14	124
1839	40	12	-	1896	Jyesh	1761	S 17		44	33	Phâl	15	124
<b>*</b> 1840	4941	11	-	1897		1762	Fr 3	Apr	• 46	34	• Vais	16	124
<b>†</b> 1841	4942		Apr	1898	Chait	1763	We 24	Mar	47	35	Jyesh	17	124
1842	43	11		1899		1764	Mo 11	Apr	48	36	Ashad	18	120
1843	44	12		1900		1765			49	37	Sråv	19	127
*1844	45	11	18	1901	Srav	1766			50	38	Bhâd	20	12
1845	46	11		1902		1767	Th 8		51	39	Aswa	21	12
1846	47	12	_	1903		1768		Mar	52	40	Kårt	22	122
1847	48	12		1904	Jyesh	1769	1 mar 1 mar 1		53	41	Agra	23	12
*1848	49	11	_	1905		1770			54	42	Paush	24	12
1849	50	11	12	1906		1771		Mar	55	43	Mâgh	25	12
1850	4951	12	-	1907	Vais	1772	121 21		56	44	Phâl	26	12
1851	4952	12	Apr	1908		1773	Th 3	Apr	57	45	Chait	27	12
•1852	53	11	-	1909	Bhåd	1774	Mo 2		58	46	Vais	28	12
1853	54	11	_	1910		1775		Apr	59	47	Jyesh	29	19
1854	55	12	_	1911		1776			60	48	Ashad	30	12
1855	56	12	-	1912	Srâv	1777	Tu 20	Mar	31. 1	49	Srâv	31	12
*1856	57	11	1	1913		1778	S 6	Apr	2	50	Bhâd	32	12
1857	58	11	1	1914		1779	Th 26		3	51	Aswa	33	12
1858	59	12	1	1915	Jyesh	1780	Tu 16	Mar	4	52	Kårt	34	12
1859	60	12	1	1916		1781	Mo 4	Apr	5	53	Agra	35	12
*1860	4961	11	1	1917		1782	Fr 23	Mar	31. 6	83.54	Paush	36	12

† Pausha omitted, and Chaitra intercalary.

## General Table of Corresponding Dates.

	SOLA	R-Y	EAR.		LUNI-S	SOLAR	-YE	AR.		JUP	TEB-CY	CLES.		
A. D.	Kali	1.000	nitial		Intercal		Ini	tial	Day.	60 Y	ears.	12	Rishi.	
	Yuga.	I	Day.	Sam	Month	Sal.		UI (LI	Day.	S. Sid.	Tel.	Years.	Sapt.	Fasli.
1861	4962	11	Ари	1918		1783	Th	11	Apr	31. 7	83.55	Mâgh	37	126
1862	63	12	-	1919		1784	Tu	1	Apr	8	56	Phál	38	127
1863	64	12	-	1920	Srâv	1785	Sa	21	Mar	9	57	Chait	39	127
*1864	65	11		1921		1786	Fr	8	Apr	10	58	Vais	40	127
1865	66	11	-	1922		1787	Tu	28	Mar	11	59	Jyesh	41	127
1866	67	12	-	1923	Jyesh	1788	s	18	Mar	12	60	Ashad	42	127
1867	68	12	-	1924		1789	Fr	5	Apr	13	84. 1	Sráv	43	127
*1868	69	11	-	1925		1790	We	25	Mar	14	2	Bhàd	44	127
1869	70	11	-	1926	Vais	1791	S	14	Mar	15	3	Aswa	45	127
1870	4971	12	-	1927		1792	Sa	2	Apr	16	4	Kårt	46	127
1871	4972	12	Apr	1928	Bhâd	1793	Th	23	Mar	17	5	Agra	47	127
*1872	73	11		1929		1794	Tu	9	Apr	18	6	Paush	48	128
1873	74	12	-	1930		1795	s	30	Mar	19	7	Mâgh	49	128
1874	75	12	-	1931	Ashad	1796	Th	19	Mar	20	8	Phâl	50	128
1875	76	12	-	1932		1797	We	7	Apr	21	9	Chait	51	128
*1876	77	11	-	1933		1798	s	26	Mar	22	10	Vais	52	128
1877	78	12	-	1934	Jyesh	1799	Fr	16	Mar	23	11	Jyesh	53	128
1878	79	12	-	1935		1800	Th	4	Apr	24	12	Ashad	54	128
1879	80	12	-	1936	Aswa	1801	Mo	24	Mar	25	13	Srâv	55	128
*1880	4981	11	-	1937		1802	s	11	Apr	26	14	Bhåđ	56	128
1881	4982	12	Apr	1938		1803	Fr	1	Apr	27	15	Aswa	57	128
1882	83	12		1939	Sråv	1804	M	20	Mar	28	16	Kårt	58	129
1883	84	12		1940		1805	s	8	Apr	29	17	Agra	59	129
*1884	85	11	-	1941		1806	Fr	28	Mar	30	18	Paush	60	129
1885	86	12	-	1942	Jyesh	1807	Sa	18	Mar	31	19	Mâgh	61	129
1886	87	12		1943			Mo	5	Apr	32	20	Phål	62	129
1887	88	12	-	1944		1809	Fr	25	Mar	33	21	Chait	63	129
*1888	89	11,	-	1945	Chait	1810	We	14	Mar	34	22	Vais	64	129
1889	90	12	-	1946		1811	Tu	2	Apr	35	23	Jyesh	65	129
1890	4991	12	-	1947		1812	Sa	22	Mar	31.36	84.24	Ashad	66	129

	CLES.	TER-CY	JUP	-	R.	YEA	OLAR	LUNI-S		AR.	-YE	SOLAR	
Sapt. Rishi.	12 Years.	ears. Tel.	60 Ye s. sid.	Day.	ial	Init	Sak Sal.	Intercal Month.	Vik Sam	tial ay.		Kali Yuga.	A. D.
67	Srâv	84.25	31.37	Apr	10	Fr	1813		1948	Apr	12	4992	1891
68	Bhåd	26	38	Mar			1814		1949	-	12	93	*1892
69	Aswa	27	39	Mar	29	s	1815	Ashad	1950	-	12	94	1893
70	Kårt	28	40	Apr	7	Sa	1816		1951	-	12	95	1894
71	Agra	29	41	Mar	27	We	1817		1952	-	12	96	1895
72	Paush	30	42	Mar	16	S	1818	Jyesh	1953	-	12	97	*1896
73	Mågh	31	43	Apr	4	s	1819		1954	-	12	98	1897
74	Phål	32	44	Mar	24	Th	1820	Aswa	1955	-	12	4999	1898
75	Chait	33	45	Apr	11	Tu	1821		1956	-	12	5000	1899
76	Vais	34	46	Apr	1	S	1822		1957	-	12	5001	*1900
77	Jyesh	35	47	Mar	22	Fr	1823	Srâv	1958	Apr	13	5002	1901
78	Ashad	36	48	Apr			1824		1959	1	13	03	1902
79	Srâv	37	49	Mar		S	1825		1960	-	13	04	1903
80	Bhåd	38	50	Mar		Fr	1826	Jyesh	1961	-	12	05	*1904
81	Aswa	39	51	Apr	6	Th	1827		1962		13	06	1905
82	Kårt	40	52	Mar		Mo	1828		1963	-	13	07	1906
83	Agra	41	53	Mar	16	Sa	1829	Chait	1964	-	13	08	1907
84	Paush	42	54	Apr	3	Fr	1830		1965	-	13	09	*1908
85	Mâgh	43	55	Mar		Tu	1831	Srâv	1966	-	13	10	1909
86	Phål	44	56	Apr	11	Мо	1832		1967	-	13	5011	1910
87	Chait	45	57	Mar	31	Fr	1833		1968	Apr	13	5012	1911
88	Vais		58;	Mar			1834	Ashad	1969		13	13	*1912
89	Jyesh	47	59	Apr			1835		1970	-	13	14	1913
90	Ashad	48	60	Mar			1836		1971	-	13	15	1914
91	Sråv	49		Mar			· · · · · ·		1972	-	13	16	1915
92	Bhåd	50	2	Apr			1836		1973		13	17	*1916
93	Aswa		3	Mar			1839	Bhâd	1974	-	13	18	1917
94	Kârt	52	4	Apr		Fr	1840		1975	-	13	19	1918
95	Agra	53	5	Apr		Tu	1841		1976	-	13	20	1919
96	Paush	11 C C C C C	32. 6	Mar			1842	Srâv	1977	-	13	5021	*1920

## General Table of Corresponding Dates.

### GENERAL TABLE OF CORRESPONDING DATES,

## TABLE XVII.-(Continued.)

# General Table of Corresponding Dates.

	SOLAR	e-Yı	EAR.		LUNI-S	OLAR	-YEA	R.		JUPI	TER-C	CLES,		
A. D.	Kali		itial	Vik.			Init	ial	Day.	60 Y	ears.	12	. Rishi.	
	Yuga,	D	ay.	Sam	Month.	Sal.			suj.	S. Sid.	Tel.	Years.	Sapt.	Fasli.
1921	5022	13	Apr	1978		1843	Sa	9	Apr	. 32. 7	84.55	Mågh	97	130
1922	23	13	-	1979		1844	We	29	Mar	8	56	Phâl	98	130
1923	24	13	-	1980	Jyesh	1845	S	18	Mar	9	57	Chait	\$9	13
*1924	25	13	-	1981		1846	S	6	Apr	10	58	Vais	100	13
1925	26	13	-	1982		1847	Th	26	Mar	•12	59	Ashad	1	13
1926	27	13	-	1983	Chait	1848	Mo	15	Mar	13	60	Srâv	2	13
1927	28	13	-	1984		1849	S	3	Apr	14	85. 1	Bhåd	3	13
*1928	29	13	-	1985	Sráv	1850	Fr	23	Mar	15	2	Aswa	4	13
1929	30	13	-	1986		1851	Th	11	Apr	16	3	Kårt	5	13
1930	5031	13	-	1987		1852	Mo	31	Mar	17	4	Agra	6	13
1931	5032	13	Apr	1988	Ashad	1853	Fr	20	Mar	18	5	Paush	7	13
•1932	33	13	-	1989		1854	Th	7	Apr	19	6	Mâgh	8	13
1933	34	13	-	1990		1855	Mo	27	Mar	20	7	Phâl	9	13
1934	35	13	-	1991	Vais	1856	Sa	17	Mar	21	8	Chait	10	13
1935	36	14	1	1992		1857	Fr	5	Apr	22	9	Vais	11	13
*1936	37	13	-	1993	Bhâd	1858	Tu	24	Mar	23	10	Jyesh	12	13
1937	38	13	-	1994		1859	Mo	12	Apr	24	11	Ashad	13	13
1938	39	13	-	1995		1860	Fr	1	Apr	25	- 12	Srây '	14	13
1939	40	14	-	1996	Srâv	1861	We	22	Mar	26	13	Bhåd	15	13
*1940	5041	13	-	1997		1862	Tu	9	Apr	27	14	Aswa	16	13
1941	5042	13	Apr	1998		1863	Sa	29	Mar	28	15	Kârt	17	13
1942	43	13	-	1999	Jyesh	1864	We	18	Mar	29	16	Agra	18	13
1943	44	14	-	2000		1865	We	7	Apr	30	17	Paush	19	13
*1944	45	13	-	2001		1866	s	26	Mar	31	18	Mâgh	20	13:
1945	46	13	-	2002	Chait	1867			Mar	32	19	Phâl	21	13:
1946	47	13	-	2003		1868	Tu	2	Apr	33	20	Chait	22	13:
1947	48	14	-	2004	Sråv	1869			Mar	34	21	Vais	23	13:
*1948	49	13	-	2005		1870				. 35	22	Jyesh	24	135
1949	50	13	-	2006		1871	We	30	Mar	36	23	Ashad	25	13:
1950	5051	13	-	2007	Ashad	1872	Mo	20	Mar	32.37	85.24	Sráv	26	18:

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## GENERAL TABLE OF CORRESPONDING DATES.

## TABLE XVII.--(Continued.)

	SOLAR	-YI	CAR.	10	LUNI-S	OLAR	YEA	и.	JUPI	TER-CY	CLES.		
A. D.	Kali	In	itial	Vik	Intercal	Sak	1.11	-1 D	60 Y	ears.	12	Rishi.	
д. D.	Yuga.		ay.	Sam	Month.	Sal	Init	ial Day.	S. Sid.	Tel,	Years.	Sapt.	Faslî.
1951	5052	14	Mar	2008		1873	s	8 Apr	32.38	85.25	Bhâd	27	1330
*1952	53	13	_	2009		1874	1000	27 Mar	39	26	Aswa	28	1331
1953	54	13	1	2010		1875	Mo	16 Mar	40	27	Kârt	29	1332
1954	55	13		2011		1876	S	4 Apr	41	28	Agra	30	1333
1955	56	14	_	2012	Bhâd	1877	Fr	25 Mar	42	29	Paush	31	1334
*1956	57	13	_	2013	and the second second	1878	1.5	12 Apr		30	Mâgh	32	1335
1957	58	13	_	2014		1879	Mo	1 Apr	44	31	Phâl	33	1336
1958	59	13		2015	Srâv	1880	Tu	21 Mar	45	32	Chait	34	1337
1959	60	14	-	2016		1881	We	10 Apr	46	33	Vais	35	1338
*1960	5061	13	-	2017		1882	Tu	29 Mar	47	34	Jyesh	36	1339
1961	5062	13	Mar	2018	Jyesh	1883	Sa	18 Mar	48	35	Ashad	37	134(
1962	63	14	-	2019		1884	Fr	6 Apr	49	36	Srâv	38	1341
1963	64	14	-	2020		1885	Tu	26 Mar	50	37	Bhåd	39	1342
*1964	65	13	-	2021	Chait	1886	S	15 Mar	51	38	Aswa	40	1343
1965	66	13	-	2022		1887	Fr	2 Apr	52	39	Kårt	41	134
1966	67	14	_	2023	Sráv	1888	We	23 Mar	53	40	Agra	41	1342
1967	68	14	-	2024		1889	Tu	11 Apr	54	41	Paush	43	1346
*1968	69	13	-	2025		1890	Sa	30 Mar	55	22	Mågh	44	1343
1969	70	13	-	2026	Ashad	1891	We	19 Mar	56	43	Phâl	45	1348
1970	5071	14	-	2027		1892	We	8 Apr	57	44	Chait	46	1345
1971	5072	14	Apr	2028		1893	s	28 Mar	58	45	Vais	47	1350
*1972	73	13	4	2029	Vais	1894	Th	16 Mar	59	46	Jyesh	48	1351
1973	74	13	_	2030		1895	We	4 Apr	60	47	Ashad	49	1333
1974	75	14	-	2031	Bhad	1896	Mo	25 Mar	33. 1	48	Sråv	50	1353
1975	76	14	_	2032		1897	s	13 Apr	2	49	Bhåd	51	135
*1976	77	13	-	2033		1898	Th	1 Apr	3	50	Aswa	52	135
1977	78	13	-	2034	Ashad	1899	Mo	21 Mar	4	51	Kårt	53	135
1978	79	14	-	2035		1900	s	9 Apr	Б	52	Agra	54	135
1979	80	14	4	2036		1901	Fr	30 Mar	10.2	53	Paush	55	135
*1980	5081	13	-	2037	Jyesh	1902	Tu	18 Mar	33. 7	85.54	Mågh	56	135

# General Table of Corresponding Dates.

## General Table of Corresponding Dates.

	SOLAT	R-Y	EAR.		LUNI-S	OLAB	-YE	AR.	JUP	ITER-C	YCLES.		
A. D.	Kali	Ini	itial	Vik	Intercal		Tali	ial Day.		ears.	12	Rishi.	
	Yuga.	D	ay.	Sam	Month.	Sal.	THE	aat Day.	S. Sid.	Tel.	Years.	Sapt.	Fasli.
1981	5082	13	Apr	2038		1903	s	5 Apr	33. 8	85.55	Phâl	57	1360
1982	83	14	12	2039	Aswa	1904	Fr	26 Mar	9	56	Chait	58	1361
1983	84	14	-	2040		1905	Th	14 Apr	10	57	Vais	59	1362
1984	85	13	-	2041		1906	Mo	2 Apr	11	58	Jyesh	60	1363
1985	86	13	-	2042	Srâv	1907	Mo	22 Mar	12	59	Ashad	61	1364
1986	87	14	-	2043		1908	Fr	11 Apr	13	60	Sråv	62	1365
1987	88	14	-	2044		1909	Tu	31 Mar	14	86, 1	Bhåd	63	1366
1988	89	13	-	2045	Jyesh	1910	Sa	19 Mar	15	2	Aswa	64	1367
1989	90	13	-	2046		1911	Fr	7 Apr	16	3	Kârt	65	1368
1990	5091	14	-	2047		1912	We	28 Mar	17	4	Agra	66	1369
1991	5092	14	Apr	2048	Vais	1913	s	17 Mar	18	5	Paush	67	1370
1992	93	13	-	2049		1914	Sa	4 Apr	19	6	Mâgh	68	1371
1993	94	14	-	2050	Bhâd	1915	Th	25 Mar	20	7	Phál	69	1372
1994	95	14	-	2051		1916	Tu	12 Apr	21	8	Chait	70	1378
1995	96	14	-	2052	***	1917	Sa	1 Apr	22	9	Vais	71	1374
1996	97	13	-	2053	Ashad	1918	Th	21 Mar	23	10	Jyesh	72	1378
1997	98	14	-	2054		1919	We	9 Apr	24	11	Ashad	73	1376
1998	99	14	-	2055		1920	S	29 Mar	25	12	Sráv	74	1377
1999	5100	14	-	2056	Jyesh	1921	Th	18 Mar	26	13	Bhâd	75	1378
2000	5101	13	-	2057		1922	We	5 Apr	33.27	86.14	Aswa	76	1379

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## TABLE XVIII.

List of Eclipses.

A.D.	LUNAR.	SOLAR.	A.D.	LUNAR.	SOLAR.
1 2 3 4 5 6 7 8 9 10	24 June 15 May — 9 Nov 4 May — 28 Oot 23 Apr — 17 Oct 3 Mar — 27 Aug 20 Feb — 17 Aug 9 Feb — 5 Aug 20 Dec 15 June — 10 Dec	10 June 23 Nov 8 Apr 28 Mar — 22 Sep 11 Sep 6 Feb — 31 Aug 26 Jan 15 Jan — 10 July 30 June — 24 Nov	51 52 53 54 55 56 57 58 59 60	14 Apr — 8 Oct 21 Feb — 18 Aug 11 Feb — 7 Aug 31 Jan — 27 July 10 Dec 5 June — 29 Nov 26 May — 19 Nov 4 Apr — 28 Sep	23 Sep 19 Mar 9 Mar 23 July — 26 Feb 13 July — 25 Dec 11 May 80 Apr — 25 Oct 13 Oct
11 12 13 14 15 16 17 18 19 20	4 June — 29 Nov 24 May 14 Apr — 7 Oct 4 Apr — 27 Sep 24 Mar — 16 Sep 30 Jan — 27 July 20 Jan — 16 July 9 Jan — 5 July 25 May — 19 Nov	14 Nov 9 May 28 Apr 18 Apr 2 Sep 21 Aug 15 Feb 1 July 21 June — 15 Dec 10 June — 3 Dec	61 62 63 64 65 66 67 68 69 70	24 Mar - 18 Sep 13 Mar - 7 Sep 22 Jan - 17 July 11 Jan - 6 July 31 Dec 17 May - 9 Nov 6 May - 29 Oct 25 Apr - 18 Oct	10 Mar — 2 Oct 28 Feb 17 Feb 1 Aug 16 Deo 31 May 19 May 4 Oct 23 Sep
21 22 23 24 25 26 27 28 29 30	15 May — 8 Nov 4 May — 28 Oct 14 Mar — 6 Sep 3 Mar — 27 Aug 20 Feb — 16 Aug 31 Dec 25 June — 20 Dec 14 June — 9 Dec 4 June	23 Nov 19 Apr 21 Sep 6 Feb 26 Jan — 22 July 10 July 24 Nov 21 May — 14 Nov	71 72 73 74 75 76 77 78 79 80	22 Dec 17 June — 11 Dec 5 June — 29 Nov	2 Aug
31 32 33 34 35 36 37 38 39 40	25 Apr - 19 Oct 14 Apr - 7 Oct 3 Apr - 27 Sep 11 Feb - 7 Aug 31 Jan - 26 July 20 Jan - 15 July 30 Nov 26 May - 19 Nov 15 May - 7 Nov	10 May 28 Apr 12 Sep 9 Mar - 1 Sep 16 Feb - 12 July 1 July - 25 Dec 21 June 4 Dec 29 Apr	81 82 83 84 85 86 87 88 89 90	11 Jan - 6 July	27 Feb — 23 Aug 12 Aug 2 Aug — 27 Dec 16 Dec 10 June 31 May 15 Oct 10 Apr — 3 Oct 30 Mar 20 Mar
41 42 43 44 45 46 47 48 49 50	25 Mar — 18 Sep 14 Mar — 7 Sep 2 Mar — 27 Aug 11 Jan — 6 July } 31 Dec } 26 June — 21 Dec 14 June 6 May — 29 Oct 25 Apr — 18 Oct	19 Apr - 13 Oct 2 Oct 28 Feb 17 Feb 1 Aug 22 July - 16 Dec 31 May - 24 Nov 20 May 9 May	91 92 93 94 95 96 97 97 98 99 100	22 Feb — 17 Aug 1 Jan — 21 Dec 17 June — 10 Dec 6 June 26 Apr — 20 Oct 15 Apr — 9 Oct 4 Apr — 29 Sep 13 Feb — 7 Aug	3 Aug 27 Jan — 27 July 5 Jan — 1 June 22 May 10 May — 3 Nov 1 Apr 21 Mar 3 Sep 23 Aug

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## TABLE XVIII .-- (Continued.)

# List of Eclipses.

				1	1
A.D.	LUNAR,	Solab,	A.D.	LUNAR.	Solab.
101 102 103 104 105 105 107 108 109 110	22 Jan — 17 July 1 Dec 27 May — 19 Nov 16 May — 9 Nov 26 Mar — 20 Sep 15 Mar — 8 Sep 4 Mar — 28 Aug	17 Jan — 12 Aug 27 Dec 22 June 10 June 25 Oct 21 Apr 11 Apr 30 Mar — 24 Aug 8 Aug	151 152 153 154 155 156 157 158 159 160	6 May — 31 Oct 26 Apr 17 Mar — 9 Sep 6 Mar — 30 Aug	25 Nov 22 Apr 21 Apr 31 Mar — 25 Sep 14 Sep 8 Feb 28 Jan — 24 June 13 July 23 May
111 112 113 114 115 116 117 118 119 120	1 Jan - 27 June 16 June 31 Oct 26 Apr - 21 Oct 14 Apr - 9 Oct 23 Feb - 18 Aug 13 Feb - 8 Aug		161 162 163 164 165 166 167 168 169 170	17 Apr - 11 Oct 6 Apr - 30 Sep 13 Feb - 9 Aug 2 Feb - 30 July 23 Jsn - 19 July 2 Dec 28 May - 22 Nov	12 May 2 May 16 Sep 4 Sep 28 Feb 18 Feb 4 July 23 June - 17 Dec 6 Dec 3 May
121 122 123 124 125 126 127 128 129 130	7 June - 1 Dec 28 May - 21 Nov 5 Apr - 30 Sep 26 Mar - 19 Sep 16 Mar - 8 Sep 23 Jan - 19 July	2 July 21 June 6 Nov 1 May — 25 Oct 21 Apr 10 Apr — 4 Sep 25 Aug 6 Feb 27 Jan — 23 June	171 172 173 174 175 176 177 178 179 180	17 Mar — 9 Sep 6 Mar — 30 Aug	22 Apr 5 Oct 19 Feb 8 Feb — 4 Aug 23 July 13 July — 8 Dec 27 Nov 24 May 12 May
138 139	6 May — 31 Oct 26 Apr 15 Apr 6 Mar — 29 Aug 23 Feb — 18 Aug 12 Feb — 8 Aug	12 June 1 June — 25 Nov 14 Nov 12 Apr 1 Apr — 25 Sep 13 Sep 3 Sep 28 Jan 18 Jan 2 July	181 182 183 184 185 186 187 188 189 190	14 Feb — 9 Aug 2 Feb — 30 July 14 Dec 8 June — 3 Dec	26 Sep 11 Mar 29 Feb 14 July 58 Jan — 4 July 58 Jan — 4 July 7 Dec 17 Dec 14 Jiay 3 May — 27 Oct 22 Apr
141 142 143 144 145 146 147 148 149 150	27 May 17 Apr — 11 Oct 5 Apr — 29 Sep 26 Mar — 18 Sep 3 Feb — 30 July	21 June — 16 Nov 13 May — 5 Nov 2 May 20 Apr 4 Sep 28 Feb 17 Feb 3 July — 7 Feb 23 June 12 June — 6 Dec	191 192 193 194 195 196 197 198 199 200		6 Oct 1 Mar 19 Feb 4 Aug 24 July 19 Dec 7 Dec 3 June 23 May 7 Ost 1 Apr

203

### TABLE XVIII.-(Continued.)

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List of Eclipses.

A.D.	LUNAR.	Solar.	A.D.	LUNAR.	Solar.
201 202 203 204 205 206 207 208 209 210	7 Mar — 31 Aug 24 Feb — 20 Aug 13 Feb — 10 Aug 24 Dec 18 June — 13 Dec 8 June — 3 Dec 28 May 18 Apr 7 Apr — 1 Oct 28 Mar — 20 Sep		251 252 253 254 255 256 257 258 259 260	9 June — 3 Dec 30 May — 22 Nov 19 May — 12 Nov 3 Oct 28 Mar 17 Mar — 11 Sep 7 Mar — 16 Aug 26 Jan — 21 July 16 Jan — 11 July	9 Jan — 6 July 24 June 13 June 4 May — 29 Oct 23 Apr 12 Apr 26 Aug 16 Aug 6 Aug 30 Jan
211 212 213 214 215 216 217 218 219 220	4 Feb — 31 July 24 Jan — 20 July 13 Jan — 9 July 19 May — 12 Nov 8 May — 1 Nov 28 Apr — 21 Oct 18 Mar — 11 Sep 6 Mar — 31 Aug	2 Mar — 25 Aug 14 Aug 3 Aug 14 June 13 June 18 Oct 12 Apr — 7 Oct 2 Apr 22 Mar	261 262 263 264 265 266 266 267 268 269 270	4 Jan — 29 June 10 May — 3 Nov 28 Apr — 22 Oct 17 Apr — 12 Oct 8 Mar 26 Feb — 22 Aug 16 Feb — 10 Aug 20 June — 15 Dec	15 June 4 June — 29 Nor 18 Nov 14 Apr 3 Apr 24 Mar — 16 Sep 6 Sep 31 Jan 16 July 5 July
221 222 223 224 225 226 227 228 229 230	24 Feb - 20 Aug {4 Jan-30 June } 25 Dec { 18 June - 13 Dec 8 June 19 Apr - 12 Oct 7 Apr - 1 Oct 14 Feb	5 Aug 30 Jan - 25 July 19 Jan 8 Jan - 4 June 24 May - 17 Nov 7 Nov 23 Mar 13 Mar 25 Aug	271 272 273 274 275 276 277 278 279 280	17 Mar 5 Feb — 1 Aug	24 June — 20 Nov 8 Nov 4 May 24 Apr 7 Sep 3 Mar — 26 Aug 20 Feb 9 Feb 26 June — 21 Dec 14 June — 9 Dec
231 232 233 234 235 236 237 238 239 240	4 Feb — 11 Aug 25 Jan — 19 July 30 May — 23 Nov 20 May — 12 Nov 8 May — 31 Oct 22 Sep 18 Mar — 11 Sep 7 Mar — 1 Sep 10 Feb	15 Aug 10 Jan — 29 Dec 25 June 14 June 3 June — 29 Oct 23 Apr — 17 Oct 2 Apr 16 Aug 5 Aug	281 282 283 284 285 286 287 288 289 290	21 May - 13 Nov 10 May - 3 Nov 29 April - 23 Oct 8 Mar - 1 Sep 26 Feb - 21 Aug 10 Aug 1 July - 25 Dec 20 June - 14 Dec 10 June - 3 Dec	25 Apr 15 Apr - 8 Oct 3 Apr - 26 Sep 16 Sep 11 Feb 31 Jan - 27 July 16 July 5 July - 30 Nov 19 Nov
241 242 243 244 245 246 247 248 249 250	15 Jan - 10 July 4 Jan-29 June 24 Dec 19 June 29 Apr - 22 Oct 18 Apr - 12 Oct 20 Ct 26 Feb - 21 Aug 14 Feb - 10 Aug 4 Feb - 30 July	29 Jan 15 June 5 June 24 May 7 Nov 3 Apr 24 Mar 4 Sep 25 Aug 20 Jan	291 292 293 294 295 296 296 297 298 299 300	25 Oct 19 Apr — 13 Oct 8 Apr — 2 Oct 28 Mar 17 Feb 6 Feb — 31 July 25 Jan — 21 July 1 June — 24 Nov 20 May — 13 Nov	15 May 4 May 17 Sep 14 Mar — 7 Sep 3 Mar 6 July — 31 Dec 25 June — 20 Dec 10 Dec 5 May

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## TABLE XVIII.-(Continued.)

List of Eclipses.

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LUNAR.	SOLAR.	A.D.	LUNAR.	Solar.
9 May 3 Nov 19 Mar 12 Sep 8 Mar 31 Aug 21 Aug 12 July 15 Jan 2 July 25 Dec 1 20 June 14 Dec 4 Nov	25 Apr 8 Oct 27 Sep 22 Feb 10 Feb — 7 Aug 27 July 16 July 30 Nov 25 May	351 352 353 354 355 355 356 357 358 359 359	27 Feb 23 Aug 12 Aug 3 July 26 Deo 22 June 16 Dec 11 June 6 Dec 20 Apr 14 Oct 10 Apr 3 Oct 31 Mar 23 Sep 13 Aug	8 Aug 2 Feb — 27 July 22 Jan — 17 July 11 Jan — 7 June 28 May 16 May — 9 Nov 29 Oct 26 Mar 13 Mar 28 Aug
30 Apr - 25 Oct 19 Apr - 14 Oct 8 Apr 27 Feb 17 Feb - 12 Aug 6 Feb - 1 Aug 11 June - 5 Dec 31 May - 24 Nov 20 May - 14 Nov	16 May 17 Sep 7 Sep 3 Mar 18 July 6 July — 31 Dec 20 Dec 16 May 6 May 25 Apr — 18 Oct	361 362 363 364 365 366 366 367 368 369 370	6 Feb — 3 Aug 26 Jan — 23 July 16 Jan 1 June — 26 Nov 21 May — 15 Nov 11 May — 4 Nov 21 Mar — 13 Sep 10 Mar — 2 Sep	17 Aug 2 Jan 16 June 6 June 20 Oct 15 Apr
30 Mar - 23 Sep 19 Mar - 12 Sep 1 Sep 22 July 16 Jan - 12 July { 5 Jan - 1 July } 25 Dec 10 May - 4 Nov 29 Apr - 24 Oct 19 Apr - 13 Oct	8 Oct 4 Mar 21 Feb 6 Aug 26 July — 22 Dec 11 Dec 6 June 25 May 9 Oct 28 Sep	371 372 373 374 375 376 376 377 378 379 380	14 July 17 Jan - 2 July 1 26 Dec 21 June - 16 Dec 2 May - 26 Oct 20 Apr - 14 Oct 10 Apr - 3 Oct 17 Feb - 14 Aug 7 Feb - 2 Aug	2 Feb — 28 July 22 Jan 7 June 27 May — 20 Nov 10 Nov 25 Mar 15 Mar — 8 Sep 28 Aug 24 Jan
10 Mar 28 Feb — 22 Aug 16 Feb — 12 Aug 1 Aug 22 June — 16 Dec 10 June — 5 Dec 31 May — 24 Nov 10 Apr — 4 Oct 30 Mar — 22 Sep	25 Mar 13 Mar 28 July 17 July 11 Jan 27 May 16 May 6 May 19 Oct 14 Mar	381 382 383 384 385 386 386 387 388 389 390	26 Jan 12 June — 7 Dec 1 June — 26 Nov 21 May — 14 Nov 1 Apr — 24 Sep 21 Mar — 14 Sep 9 Mar — 2 Sep 17 Jan — 13 July	12 Jan — 8 July 27 June 11 Nov 31 Oct 15 Apr 30 Aug 18 Aug 12 Feb
19 Mar — 11 Sep 3 Aug 27 Jan — 23 July 16 Jan — 12 July 4 Jan 21 May — 15 Nov 11 May — 4 Nor 29 Apr — 23 Oct 21 Mar 10 Mar — 2 Sep	4 Mar 17 Aug 6 Aug 2 Jan — 21 Dec 16 June 6 June 20 Oct 9 Oct 4 Apr 24 Mar	391 392 393 394 395 396 397 398 397 398 399 400	{7 Jan - 2 July 27 Dec 2 May - 5 Nov 2 May - 25 Oct 21 Apr - 14 Oct 28 Feb - 24 Aug 17 Feb - 14 Aug 7 Feb 22 June - 17 Dec	18 June 7 June 20 Nov 16 Apr 6 Apr 3 Feb 23 Jan — 19 July 8 July

207

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## TABLE XVIII.-(Continued.)

## List of Eclipses.

<b>▲</b> .D.	LUNAR.	Solar.	A.D.	LUNAR.	Solar.
401 402 403 404 405 406 407 408 409 410	31 Mar — 24 Sep 20 Mar — 14 Sep	27 June 11 Nov 7 May — 31 Oct 25 Apr 15 Apr — 9 Sep 6 Mar — 29 Aug 24 Feb — 19 Aug 13 Feb 29 June 18 June — 12 Dec	451 452 453 454 455 456 456 457 458 459 460	2 Apr - 26 Sep 21 Mar - 15 Sep 11 Mar - 4 Sep 19 Jan - 15 July 19 Jan - 3 July 27 Dec 14 May - 6 Nov 3 May - 27 Oct 21 Apr - 16 Oct	7 Mar 24 Feb 13 Feb — 10 Aug 30 July 13 Dec 8 June — 3 Dec 28 May 18 May — 12 Oct 30 Sep
411 412 413 414 415 416 417 418 419 420	•	27 Apr 16 Apr 6 Apr — 30 Sep 19 Sep 3 Feb 19 July 8 July — 3 Dec	461 462 463 464 465 466 467 468 469 470	2 Mar - 25 Aug 19 Feb - 15 Aug 9 Feb - 3 Aug 24 June - 18 Dec 14 June - 7 Dec 3 June - 27 Nov 12 Apr - 7 Oct 1 Apr - 26 Sep	27 Mar — 20 Sep 17 Mar 1 Aug 20 July 13 Jan — 9 July 2 Jan 19 May 8 May — 1 Nor 21 Oct 10 Oct
421 422 423 424 425 426 427 428 429 430	12 Apr — 5 Oct 31 Mar — 24 Sep 8 Feb — 4 Aug	17 May 11 Nov 6 May 26 Apr 9 Sep 6 Mar 29 Aug 23 Feb 10 July 22 Dec 12 Dec	471 472 473 474 475 476 477 478 479 480	19 Jan — 15 July 8 Jan — 4 July 24 May — 17 Nov 13 May — 6 Nov 2 May — 27 Oct	7 Mar 20 Aug 9 Aug 4 Jan 19 June 7 June 28 May 12 Oct 8 Apr — 1 Oct 27 Mar
431 432 433 434 435 436 437 438 439 440	11 Mar — 4 Sep 28 Feb — 24 Aug {8 Jan — 3 July 28 Dec	27 Apr 16 Apr - 10 Oct 29 Sep 25 Feb 14 Feb 3 Feb - 29 July 13 Dec - 19 July 3 Dec 17 May	491 482 483 484 485 486 487 488 489 490	6 July - 30 Dec 24 June - 18 Dec 14 June - 7 Dec 23 Apr - 18 Oct	11 Aug 31 July 24 Jan 14 Jan 29 May 19 May — 12 Nov 1 Nov 29 Mar 18 Mar 7 Mar
441 442 443 444 445 446 447 448 449 450	11 Apr — 5 Oct 19 Feb — 14 Aug 8 Feb — 3 Aug 28 Jan — 24 July 14 June — 8 Dec 3 June — 26 Nov 23 May — 16 Nov	6 May - 1 Oct 20 Sep 17 Mar 20 July 10 July 29 June - 23 Dec 8 May		23 Mar — 16 Sep 13 Mar — 5 Sep	21 Aug 15 Jan 4 Jan 19 June 8 June — 3 Nov 22 Oct 18 Apr 7 Apr 22 Aug 10 Aug

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## TABLE XVIII.-(Continued.)

List of Eclipses.

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A.D.	LUNAR.	SOLAR.	A.D.	LUNAR.	SOLAB.
501		31 July	551	4 June	21 May
502	(9 Jan – 6 July)	24 Jan	552	24 Apr — 18 Oct	9 May
503	) 29 Dec ( 25 June — 19 Dec	10 June	553 554	14 Apr — 7 Oct 3 Apr — 27 Sep	23 Sep
504		29 May	555	• npr = 21 bep	
505 506	4 May — 28 Oct 28 Apr — 18 Oct	· · · · · · · · · · · · · · · · · · ·	556		26 Feb
507	13  Apr = 7  Oct	9 Apr 29 Mar	557 558	30 Jan 27 July   20 Jan 16 July	15 Feb — 12 July 1 July
508 509		17 Mar - 11 Sep	559	30 Nov — 21 June	21 June
510	20 Feb — 16 Aug 9 Feb — 5 Aug	31 Aug	560	25 May - 19 Nov	3 Dec
	Ŭ		FCI	IF Man 9 Non	80.1
511	29 <b>Jan</b> — 26 July	15 <b>Jan</b>	561 562	15 May - 8 Nov	30 Apr 19 Apr — 14 Oct
512 513	15 June — 9 Dec	29 June	563		3 Oct
514	4 June — 28 Nov 24 May — 18 Nov	19 June 2 No <b>v</b>	564 565	13 Mar — 6 Sep 2 Mar — 27 Aug	28 Feb — 21 Sep 16 Feb
515 516		23 Oct	566		1 Aug
516 517	3 Apr — 26 Sep 23 Mar — 15 Sep	18 Apr 7 Apr	567	{11 Jan - 7 July     } 31 Dec	22 July — 16 Dec
518	13 Mar — 5 Sep	22 Aug	568	25 June - 20 Dec	
519 520	20 Jan - 16 July	16 Feb — 11 Aug 5 Feb	569 570	14 June 6 May - 29 Oct	31 May — 24 Nov 20 May
		0 100		0 May - 25 005	20 may
521	{8 Jan - 5 July }	20 June	571	25 Apr — 18 Oct	9 May
522	1 29  Dec	10 June — 4 Dec	572	14  Apr = 7  Oct	23 Sep
523	15 May - 9 Nov	23 Nov	573 574	21 Feb - 18 Aug	19 Mar — 12 Sep 9 Mar
524 525	3 May — 28 Oct 23 Apr — 17 Oct	11 Nov	575	11  Feb = 7  Aug	23 July
526		22 Sep	576 577	31 Jan — 26 July 11 Dec	12 July
527 528	4 Mar — 27 Aug 21 Feb — 16 Aug	11 Sep	577		5 Jan - 25 Dec
529	9 Feb — 5 Aug	6 Feb 25 Jan	579	26 May - 19 Nov	11 May
530	20 Deo	15 Jan — 10 July	580		29 Apr — 24 Oct
531	15 June — 10 Dec	30 June	581	5 Apr - 28 Sep	13 Oct
532	3 June - 28 Nov	13 Nov	582 583	25 Mar — 18 Sep 14 Mar — 7 Sep	10 Mar — 2 Oct 28 Feb
533 534	14 Apr — 8 Oct	10 <b>May</b> 29 Apr	584	14 Mai = 7 Sep	17 Feb — 11 Aug
535	4 Apr - 27 Sep	18 Apr — 13 Sep	585	21 Jan — 17 July (11 Jan — 6 July)	1 Aug
536 537	23 Mar — 15 Sep	1 Sep	586	} 31 Dec ∫	16 Dec
538	31 Jan — 27 July	25 Feb — 21 Aug 15 Feb	587	25 June	11 June — 5 Dec
539 540	20 Jan — 17 July 9 Jan — 5 July	1 July	588 589	16 May - 9 Nov 6 May - 29 Oct	31 May 20 May 15 Oct
1 11	soan — souly	20 June — 14 Dec	590		4 Oct
541	25 May - 19 Nov	3 Dec	591		30 Mar — 23 Sep
542	15 May - 8 Nov		591 592	4 Mar - 28 Aug	30 Mar — 25 Sep 19 Mar
543 544	4 May - 28 Oct	20 Apr	593		2 Aug
545	14 Mar — 6 Sep	8 Apr 22 Sep	594 593	10 Feb - 6 Aug 22 Dec	23 July 16 Jan — 12 July
546 547	3 Mar — 27 Aug 20 Feb — 17 Aug	16 Feb	596	15 June — 10 Dec	5 Jan — 25 Dec
548	30 Dec	6 Feb 21 July	597 598	5 June — 29 No7	21 May 11 May
549 530	25 June — 20 Dec	10 July - 5 Dec	599	16 Apr - 9 Oct	30 Apr - 25 Oct
530	15 June — 9 Dec	24 Nov	600	4 Apr — 28 Sep	
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209

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### TABLE XVIII.-(Continued.)

List of Eclipses.

-		and the second se			
A.D.	LUNAR.	SOLAR.	A.D.	LUNAR.	SOLAB.
601 602 603 604 605 606 606 607 608 609 610	24 Mar — 17 Sep 1 Feb — 28 July 22 Jan — 16 July 11 Jan — 6 July 27 May — 20 Nov 17 May — 9 Nov 5 May — 29 Oct 15 Mar — 8 Sep	10 Mar 22 Aug 12 Aug (7 Jan — 1 Aug ) 2 26 Dec ) 22 June — 16 Dec 11 June 31 May — 26 Oct 10 Apr 30 Mar	651 652 653 654 655 656 656 657 658 659 669	5 Mar — 29 Aug 23 Feb — 18 Aug 13 Feb — 8 Aug	27 Jan — 23 June 11 June 1 June — 26 Nov 12 Apr 31 Mar — 23 Sep 13 Sep 8 Feb — 3 Sep 28 Jan 18 Jan — 13 July
611 612 613 614 615 616 617 618 619 620	4 Mar - 29 Aug 22 Feb - 17 Aug 1 Jan-27 June { 22 Dec } 16 June - 11 Dec 5 June 26 Apr - 20 Oct 15 Apr - 9 Oct 4 Apr - 29 Sep	20 Mar 2 Aug 23 July 5 Jan — 2 June 21 May — 15 Nov 10 May — 4 Nov 1 Apr — 24 Oct 21 Mar 10 Mar — 2 Sep	661 662 663 664 665 666 667 668 669 670	16 Apr - 10 Oct 5 Apr - 30 Sep 26 Mar - 19 Sep 3 Feb - 29 July 23 Jan - 18 July	2 July 1 May 21 Apr 4 Sep 28 Feb — 25 Aug 17 Feb 6 Feb 23 June — 18 Dec
621 622 623 624 625 626 627 628 629 630	12 Feb - 8 Aug 1 Feb - 28 July 22 Jan - 17 July 6 June - 30 Nov 27 May - 20 Nov 17 May - 9 Nov 25 Mar - 19 Sep 15 Mar - 8 Sep 4 Mar - 28 Aug	22 Aug 17 Jan — 12 Aug 27 Dec 21 June 10 June 26 Oct 21 Apr — 15 Oct 10 Apr 30 Mar — 24 Aug 13 Aug	676	17 May — 10 Nov 6 May — 31 Oct 17 Mar — 9 Sep 5 Mar — 29 Aug 23 Feb — 18 Aug (2 Jan — 29 June) 23 Dec 5	12 June — 7 Dec 25 Nov 22 Apr 12 Apr — 5 Oct 25 Sep 13 Sep 23 Jan — 24 July 13 July 27 Nov
631 632 633 634 635 636 636 637 638 639 640	{1 Jan - 27 June}         21 Dec         16 June         7 May - 31 Oct         26 Apr - 20 Oct         15 Apr - 9 Oct	3 Aug 27 Jan 12 June 1 June 15 Nov 11 Apr — 3 Nov 1 Apr 21 Mar 3 Sep	681 682 683 684 685 686 687 689 689 689	5 Apr - 29 Sep 14 Feb - 9 Aug 3 Feb - 30 July 23 Jan - 18 July 2 Dec 28 May - 22 Nov	23 May — 16 Nov 12 May 2 May 14 Sep 4 Sep 28 Feb 15 July 3 July — 28 Dec 22 June — 17 Dec 6 Dec
641 642 643 644 645 646 647 648 649 650	27 May — 19 Nov 5 Apr — 30 Sep 26 Mar — 19 Sep 14 Mar — 7 Sep	17 Jan 2 July 21 June 5 Nov 1 May — 25 Oct 21 Apr 4 Sep 24 Aug 17 Feb — 13 Aug 6 Feb	691 692 693 694 695 696 697 698 699 700	6 May 27 Mar — 20 Sep 17 Mar — 9 Sep 6 Mar — 29 Aug	3 May 22 Apr 5 Oct 19 Feb 23 July — 19 Deo 13 July — 8 Deo 3 June — 27 Nov 23 May

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## TABLE XVIII.-(Continued.)

List of Eclipses.

	Terres	9			0
A.D.	LUNAR.	SOLAR.	A.D.	LUNAR.	SOLAR.
701 702	27 Apr — 21 Oct 16 Apr — 10 Oct	12 May 26 Sep	751 752	15 Feb — 11 Aug 4 Feb — 31 July	25 Aug 14 Aug
703		22 Mar	753	24 Jan — 20 July	9 Jan — 29 Dec
704 705	25 Feb — 19 Aug	10 Mar 98 Feb 95 Jul-	754	4 Dec	25 June
706	13 Feb — 9 Aug 2 Feb — 30 July	28 Feb — 25 July 14 July	755 756	30 May - 23 Nov 18 May - 11 Nov	14 June 28 Oct
707	13 Dec	4 July - 29 Dec	757	8 May	23 Apr
708 709	8 June — 2 Dec 28 May — 22 Nov	17 Dec 14 May	758		12 Apr
710	17 May	3 May - 27 Oct	759 760	18 Mar — 11 Sep 6 Mar — 31 Aug	2 Apr 15 Aug
· ·	-	•			5
711 712	7 Apr - 1 Oct	16 Oct	761		5 Aug
713	27 Mar — 19 Sep 17 Mar — 9 Sep	5 Oct 1 Mar	762	15 Jan — 10 July {4 Jan — 30 June }	30 Jan
714	·	19 Feb — 15 Aug	763	25 Dec ∫	18 Jan — 16 June
715 716	24 Jan — 21 July 13 Jan — 9 July	4 Aug 23 July	764	18 June	4 June - 28 Nov 24 Mar
717	2 Jan - 28 June	25 July	765 766	9 May 29 Apr — 22 Oct	24 May 7 Nov
718 719	12 Nov	3 June	767		3 Apr
720	8 May — 2 Nov 27 Apr — 21 Oct	24 May 6 Oct	768 769	25 Feb - 22 Aug	23 Mar 5 Sep
		0.000	770		25 Aug
721		1 Apr — 26 Sep			
722	7 Mar - 31 Aug	21 Mar	771	4 Feb - 31 July	
723 724	24 Feb - 20 Aug	11 Mar	772	15 Dec	5 July
725	13 Feb — 9 Aug 24 Dec	25 July 19 Jan — 14 July	773 774	9 June - 4 Dec 30 May - 23 Nov	24 June
726	19 June — 13 Dec	8 Jan — 28 Dec	775	19 May	4 May - 29 Oct
727 728	8 June — 3 Dec 27 May	25 May 13 May — 6 Nov	776	8 Apr - 2 Oct	19 4
729	18 Apr - 11 Oct	27 Oct	777 778	28 Mar — 21 Sep 17 Mar — 11 Sep	12 Apr 26 Aug
730	7 Apr - 1 Oct	16 Oct	779		21 Feb - 16 Aug
731	00 M	10 1.	780	26 Jan — 21 July	10 Feb
732	28 Mar - 20 Sep	12 Mar 1 Mar 25 Aug			
733	3 Feb — 31 July	14 Aug	781	15 Jan - 10 July	29 Jan — 26 June 15 June
734	24 Jan - 20 July	{ 10 Jan — 3 Aug } 30 Dec }	782 783	4 Jan — 29 June	29 Nov
735	13 Jan — 9 July	19 Dec	784		17 Nov
736	23 Nov		785 786		13 Apr 3 Apr — 27 Sep
737 738	18 May — 12 Nov 8 May — 1 Nov	3 Jnne 18 Oct	787	8 Mar - 2 Sep	16 Sep
739		7 Oct	788		31 Jan
740	18 Mar – 10 Sep	l Apr	789 790		20 Jan
741	7 Mar — 31 Aug				
742	24 Feb - 20 Aug	5 Aug	791		6 Jul <b>y</b> 24 June — 19 Nov
743	(4 Jan - 29 June)	30 Jan	792 793		8 Nov
744	24 Dec	19 Jan	794	13 Oct	4 May
745	18 June — 13 Dec	4 June	795 796	9 Apr — 3 Oct 28 Mar — 21 Sep	23 Apr 6 Sep
746 747	8 June 29 Apr	25 May 14 May — 7 Nov	797		3 Mar
748	· 18 Apr — 11 Oct	27 Oct	798	5 Feb — 1 Aug 26 Jan — 21 July	20 Feb 9 Feb — 7 July
749	7 Apr — 30 Sep	23 Mar	799 800		26 June
750					
L					

### TABLE XVIII.--(Continued.)

List of Eclipses. r.

A.D.	LUNAR.	Solar.	A.D.	LUNAB.	Solab.
801 802 803 804 805 806 807 808 807 808 809 810	21 May — 13 Nov 10 May — 2 Nov 22 Oct 19 Mar — 12 Sep 8 Mar — 1 Sep 26 Feb — 21 Aug (5 Jan — 1 July) 25 Dec { 20 Jan — 14 Dec	15 June — 9 Dec 29 Nov 25 Apr 13 Apr 3 April — 26 Sep 16 Sep 11 Feb 31 Jan — 27 July 16 July 5 July — 30 Nov	857	19 Apr 9 Mar 27 Feb — 22 Aug 16 Feb — 12 Aug 22 June — 15 Dec 11 June — 5 Dec 31 May — 24 Nov 9 Apr — 3 Oct	5 Apr 24 Mar — 17 Sep 13 Mar 28 July 17 July 11 Jan — 31 Dec 27 May 6 May — 29 Oct 18 Oct
811 812 813 814 815 816 817 818 819 820	10 June 23 Oct 19 Apr — 13 Oct 8 Apr — 3 Oct 28 Mar 17 Feb — 11 Aug 5 Feb — 31 July 26 Jan — 21 July 31 May — 23 Nov	14 May 4 May 17 Sep 7 Sep 2 Mar 19 Feb 7 July 26 June 9 Dec	861 862 863 864 865 866 867 868 869 870	27 Jan — 22 July 15 Jan — 12 July 26 Nov 22 May — 15 Nov 10 May — 4 Nov 29 Apr	15 Mar 4 Mar — 29 Aug 18 Aug 6 Aug 1 Jan — 21 Dec 16 June 6 June 19 Oct 9 Oct
821 822 823 824 825 826 827 828 828 829 830	20 May - 13 Nov 9 May - 2 Nov 24 Sep 18 Mar - 12 Sep 8 Mar - 1 Sep 17 Jan - 12 July 16 Jau - 1 July 25 Dec 20 June 4 Nov	5 May 25 Apr 8 Oct 26 Sep 7 Aug 27 July 15 July 30 Nov 25 May	871 872 873 874 875 876 875 876 877 878 879 880	28 Feb - 22 Aug 12 Aug 3 July - 26 Dec 22 June - 16 Dec 10 June - 5 Dec 20 Apr - 15 Oct 10 Apr - 4 Oct	
831 832 833 834 835 836 837 838 839 840	30 Apr 21 Oct 18 Apr 13 Oct 8 Apr 27 Feb 17 Feb 12 Aug 6 Feb 31 July  11 June 5 Dce 1 June 24 Nov 20 May 13 Nov	15 May 25 Mar - 17 Sep 14 Mar - 7 Sep 3 Mar 17 July {10 Jan - 6 July } 31 Dec 16 May 5 May - 29 Oct	881 882 883 884 885 886 885 886 887 888 887 888 889 890	16 Jan — 6 Dec 1 June — 26 Nov 21 May — 15 Nov 11 May 31 Mar 21 Mar — 13 Sep	28 Aug 17 Aug 2 Jan — 26 June 16 June 6 June 20 Oct 15 Apr — 9 Oct 4 Apr 19 Aug
843 844 845 846 846 847 848 849	30 Mar — 23 Sep 19 Mar — 12 Sep 27 Jan — 22 July 16 Jan — 12 July 5 Jan — 2 July 14 Nov 11 May — 4 Nov 30 Apr — 24 Oct	25 Apr - 18 Oct 5 Mar 22 Feb 7 Aug 27 July - 22 Dec 11 Dec 5 June 25 May 9 Oct	894 895 896 897 898 898	6 Jan - 2 July   26 Dec   22 June - 16 Dec   1 May - 25 Oct	12 Feb 2 Feb 17 June 7 June 28 May — 20 Nov 5 Apr 26 Mar 15 Mar

212

## TABLE XVIII.-(Continued.)

# List of Eclipses.

<b>A.</b> D.	LUNAR.	Solar.	A.D.	LUNAR.	Solab.
901 902 903 904 905 906 907 908 909 910	6 Feb — 3 Aug 26 Jan — 17 Dec 12 June — 7 Dec 31 May — 25 Nov 21 May 1 Apr — 24 Sep 20 Mar — 13 Sep 2 Sep 24 July	23 Jan 12 Jan — 8 July 27 June 16 June — 10 Nov 26 Apr 15 Apr 29 Aug 18 Aug 12 Feb	951 952 953 954 955 955 956 957 958 959 959 960	28 Feb	8 May 26 Apr 16 Apr 14 Feb — 8 Aug 29 July 19 July — 13 Dec 2 Dec 28 May
911 912 913 914 915 915 916 917 918 919 920	17 Jan — 14 July 17 Jan — 2 July 26 Dec 12 May — 5 Nov 2 May — 25 Oct 20 Apr — 13 Oct 28 Feb — 24 Oct 17 Feb — 14 Aug 7 Feb — 28 Dec	2 Feb 17 June 7 June 20 Nov 17 Apr 5 Apr 19 Sep 8 Sep 3 Feb 24 Jan — 18 July	961 962 963 964 965 966 966 966 968 968 969 970	8 Feb — 4 Aug 28 Jan 13 June — 7 Dec	17 May 1 Oct 20 Sep 16 Mar 6 Mar 20 July 10 July 22 Dec 19 May 8 May
921 922 923 924 925 926 927 928 929 930	23 June — 17 Dec 12 June — 7 Dec 1 June 11 Apr — 4 Oct 1 Apr — 24 Sep 14 Sep 4 Aug 27 Jan — 24 July 17 Jan — 13 July	8 July 27 June — 21 Nov 11 Nov 6 May 25 Apr 10 Sep 6 Mar — 30 Aug 24 Feb — 18 Aug 12 Feb 29 June	971 972 973 974 975 976 976 977 978 979 980	1 Apr - 25 Sep 21 Mar - 15 Sep 11 Mar - 4 Sep 19 Jan - 14 July 18 Jan - 3 July 28 Dec 14 May - 6 Nov 3 May - 26 Oct	27 Apr — 22 Oct 10 Oct 7 Mar 25 Feb — 20 Aug 10 Aug 29 July 13 Dec 8 June 28 May 17 May
931 932 933 934 935 936 937 938 938 939 939	12 May — 5 Nov 2 May — 25 Oct	18 June — 12 Dec 30 Nov 27 Apr 16 Apr — 11 Oct 6 Apr — 30 Sep 18 Sep 13 Feb 3 Feb 19 July 8 July	981 982 983 984 985 986 986 987 988 989 989 990	19 Feb — 14 Aug 8 Feb — 3 Aug 24 June — 19 Dec 14 June — 8 Dec	30 Sep 28 Mar — 20 Sep 17 Mar 30 July 20 July 13 Jan 18 May 8 May — 1 Nov 21 Oct
	8 Feb — 4 Aug 28 Jan — 23 July	21 Nov 17 May — 11 Nov 7 May 25 Apr — 20 Sep 16 Mar — 9 Sep 6 Mar — 29 Aug 9 July 28 June — 22 Dec 12 Dec	991 992 993 994 995 996 997 998 999 1000	21 Mar - 14 Sep 30 Jan - 25 July 19 Jan - 14 July 8 Jan 24 May - 17 Nov 14 May - 6 Nov 3 May - 27 Oct	24 Feb - 20 Aug 9 Aug 4 Jan 7 June

## TABLE XVIII-(Continued)

List of Eclipses.

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A.D.	LUNAR.	SOLAB.	A.D.	LUNAR.	Solab.
1001 1002 1003 1004 1005 1006 1007 1008 1009 1010	1 Mar - 25 Aug 19 Feb - 14 Aug 4 July - 29 Dec 24 June - 18 Dec 7 Dec 23 Apr - 17 Oct 12 Apr - 6 Oct	31 July 24 Jan — 20 July	1053 1054 1055 1056 1057 1058 1059	15 June — 8 Dec 4 June — 28 Nov 14 Apr — 8 Oct 2 Apr — 26 Sep 23 Mar — 15 Sep	15 Jan — 10 July 29 June — 24 Nov 13 Nov 10 May 29 Apr 12 Sep 25 Feb — 22 Aug 15 Feb 30 June
1013 1014 1015 1016 1017 1018 1019	10 Feb — 4 Aug 29 Jan — 25 July 19 Jau — 14 July 5 June — 28 Nov 24 May — 17 Nov 13 May — 6 Nov	4 Jan — 30 June 19 June 7 June — 2 Nov	1064 1065 1066 1067 1068 1069	25 May - 19 Nov 15 May - 8 Nov 3 May - 28 Oct	20 June 1 May 19 Apr 8 Apr 22 Sep 16 Feb 6 Feb 21 July 10 July 5 Dec
1023 1024 1025 1026 1027 1028 1029	16 July 19 Jan — 5 July 19 Jan — 5 July 29 Dec 1 24 June — 18 Dec 4 May — 28 Oct 23 Apr — 18 Oct 12 Apr — 6 Oct	29 May — 23 Nov 12 Nov 9 Apr — 1 Nov 28 Mar 11 Sep	1072 1073 1074 1075 1076 1077 1078	10 Feb — 6 Aug 30 Jan — 27 July 20 Jan	29 Apr 13 Sep 1 Sep 25 Feb
1031 1032 1033 1034 1035 1036 1037 1038	24 May - 18 Nor 2 Apr - 27 Sep 23 Mar - 16 Sep 13 Mar - 5 Sep	15 Jan - 10 July 4 Jan - 29 June 18 June 29 Apr - 22 Oct 18 Apr 1 Sep	1082 1083 1084 1085 1086 1087 1088	Lil Ian 6 Inir)	3 Dec 30 Apr 14 Oct 2 Ocs 16 Feb 1 Aug 20 July 24 Nov
1041 1042 1043 1044 1045 1046 1047 1045 1045	20 Jan - 16 July 19 Jan - 3 July 1 29 Dec 14 May - 8 Nor 3 May - 20 Oct 23 Apr - 17 Oct 3 Mar - 6 Aug 20 Feb - 13 Aug 9 Feb - 3 Aug	20 Jane 9 Jane – 4 Dec 22 Nor 19 Apr – 11 Nor 9 Apr 29 Mar – 22 Sep 10 Sep 3 Feb	1005 1 94 1005 1095 1095 1095	24 Apr = 15 Oct 14 Apr = 7 Oct 22 Feb = 15 Aug 11 Feb = 6 Aug 24 Jan = 27 Jaly	21 May 9 May 23 Sep 19 Mar 22 July 15 Jan - 1 July ( 25 Dec

## TABLE XVIII.-(Continued.)

# List of Eclipses.

					1
A.D.	LUNAR.	SolAr.	A.D.	LUNAR.	Solar.
1101 1102 1103 1104 1105 1106 1107 1108 1109 1110	5 Apr - 28 Sep 25 Mar - 17 Sep 13 Mar - 6 Sep 21 Jan - 17 July 11 Jan - 6 July ( 31 Dec 5 25 June 16 Mar - 9 Nov 5 May - 29 Oct	30 Apr — 24 Oct 10 Mar 16 Feb 1 Aug — 27 Dec 16 Dec 11 June 31 May 20 May — 15 Oct	1151 1152 1153 1154 1155 1156 1156 1157 1158 1159 1160	12 Jan — 7 July 11 Jan — 27 June 21 Dec } 16 June 7 May — 30 Oct 26 Apr — 19 Oct 15 Apr — 9 Oct	13 Aug 7 Feb — 2 Aug 26 Jan 12 June 1 June — 26 Nov 21 May 11 Apr — 4 Nov 21 Mar 2 Sep
1111 1112 1113 1114 1115 1116 1117 1118 1119 1120	4 Mar - 28 Aug	29 Mar — 22 Sep 19 Mar 2 Aug 23 July 22 May 11 May 24 Oct	1161 1162 1163 1164 1165 1166 1167 1168 1169 1170	1 Feb — 27 July 18 June — 12 Dec 6 June — 30 Nov 27 May — 19 Nov 6 Apr — 30 Sep 25 Mar — 19 Sep	28 Jan 17 Jan 6 Jan — 3 July 21 June — 16 Nov 1 May 21 Apr 9 Apr — 3 Sep 24 Aug
1121 1122 1123 1124 1125 1126 1127 1128 1129 1130	4 Apr - 28 Sep 24 Mar - 17 Sep 1 Feb - 28 July 21 Jan - 17 July 11 Jan - 6 July 27 May - 20 Nov 16 May - 8 Nov 5 May - 29 Oct	20 Mar — 13 Oct 10 Mar 22 Aug 11 Aug 6 Jan — 26 Dec 22 June 11 June 30 May — 25 Oct 15 Oct 4 Oct	1171 1172 1173 1174 1175 1176 1177 1178 1179 1180	13 Jan 1 Jan — 27 June 18 May — 10 Nov 7 May — 31 Oct 25 Apr — 19 Oct 5 Mar — 30 Aug	27 Jan — 23 June 12 June 1 June — 26 Nov 15 Nov 11 Apr 23 Sep 13 Sep 8 Feb — 3 Sep 28 Jan
1131 1132 1133 1134 1135 1136 1137 1138 1139 1140	15 Mar — 8 Sep 3 Mar — 28 Aug 21 Feb 17 Aug { 1 Jan - 27 June } 2 2 Dec { 15 June - 10 Dec 5 June 26 Apr - 20 Oct 16 Apr - 9 Oct 4 Apr - 28 Sep	30 Mar 19 Mar 2 Aug 27 Jan — 23 July 16 Jan 5 Jan — 1 June 21 May — 15 Nov 4 Nov 20 Mar	1181 1182 1183 1184 1185 1186 1187 1188 1189 1190	5 Apr — 30 Sep 26 Mar — 19 Sep 3 Feb — 29 July 23 Jan — 18 July	17 Jan — 13 July 2 July 17 Nov 5 Nov 1 May 21 Apr 4 Sep 29 Feb — 24 Aug 17 Feb 6 Feb — 4 July
1141 1142 1143 1144 1145 1146 1147 1148 1149 1150	22 Jan — 16 July 6 Jan — 1 Dec 27 May — 20 Nov 17 May — 9 Nov 26 Mar — 19 Sep	10 Mar — 2 Sep 12 Aug 6 Jan — 26 Dec 22 June 11 June — 6 Nov 26 Oct 20 Apr — 14 Oct 9 Apr 24 Aug	1191 1192 1193 1194 1195 1196 1197 1198 1199 1200		23 June — 18 Dec 11 June — 6 Dec 22 Apr 12 Apr — 5 Oct 13 Sep 7 Feb 28 Jan — 24 July 12 July — 8 Dec

### TABLE XVIII.-(Continued.)

List of Eclipses.

A.D.	LUNAR.	Solar.	A.D.	LUNAR.	Solab.
1201 1202 1203 1204 1205 1206 1207 1208 1209 1210	18 June — 11 Dec 27 Apr — 22 Oct 16 Apr — 10 Oct 5 Apr — 29 Sep 14 Feb — 9 Aug 3 Feb — 29 July 22 Jan — 18 July 9 June — 2 Dec	27 Nov 23 May 12 May 1 May 11 Mar — 4 Sep 28 Feb 14 July 3 July — 28 Dec 17 Dec	1251 1252 1253 1254 1255 1256 1257 1258 1259 1260	7 Apr — 1 Oct 27 Mar — 19 Sept 4 Feb — 31 July 24 Jan — 20 July 13 Jan — 9 July 23 Nov 18 May — 12 Nov 8 May — 1 Nov	16 Oct 11 Mar 1 Mar - 25 Aug 14 Aug 10 Jan - 20 Dec 18 Dec 13 June 3 June 12 Apr - 6 Oct
1211 1212 1213 1214 1215 1216 1217 1218 1219 1220	29 May — 22 Nov 17 May — 10 Nov 27 Mar — 20 Sep 17 Mar — 9 Sep 5 Mar — 28 Aug 13 Jan — 9 July {2 Jan-29 June } 22 Dec f	2 May 22 Apr 5 Oct 2 Mar 19 Feb 7 Feb — 4 Aug 24 July — 19 Dec 2 June	1261 1262 1263 1264 1265 1266 1267 1268 1269 1270	18 Mar - 10 Sep 7 Mar - 31 Aug 24 Feb - 20 Aug 3 Jan - 30 June { 24 Dec } 19 June - 13 Dec 8 June 28 Apr - 22 Oct 18 Apr - 11 Oct 7 Apr - 30 Sep	1 Apr 5 Aug 30 Jan 19 Jan 8 Jan — 4 June 25 May 13 May — 6 Nov 23 Mar
1221 1222 1223 1224 1225 1226 1227 1228 1229 1230	8 May - 1 Nov 27 Apr - 22 Oct 16 Apr - 11 Oct 24 Feb - 19 Aug 14 Feb - 9 Aug 3 Feb - 30 July 12 Dec 8 June - 2 Dec 28 May - 22 Nov	23 May 12 May 6 Oct 26 Sep 21 Mar 28 Feb 25 July 15 July 3 July 28 Dec 14 May	1271 1272 1273 1274 1275 1276 1277 1278 1279 1280	15 Feb — 10 Aug 3 Feb — 31 July 23 Jan — 20 July 4 Dec 29 May — 23 Nov 18 May — 12 Nov 8 May 29 Mar — 21 Sep 18 Mar — 10 Sep	12 Mar — 6 Sep 25 Aug 20 Jan — 14 Aug 25 June 13 June 28 Oct 23 Apr 12 Apr 1 Apr
1231 1232 1233 1234 1235 1236 1237 1238 1239 1240	6 Apr — 1 Oct 27 Mar — 20 Sep 17 Mar — 9 Sep 24 Jan — 20 July 12 Jan — 9 July 2 Jan — 29 June 12 Nov 7 May — 1 Nov	3 May 26 Oct 15 Oct 5 Oct 1 Mar 19 Feb 15 Aug 3 Aug 19 Dec 8 Dec 3 June 23 May	1281 1282 1283 1284 1285 1286 1286 1287 1288 1289 1290	7 Mar - 31 Aug 14 Jan - 11 July 14 Jan - 29 June 24 Dec 18 June 9 May - 2 Nov 29 Apr - 22 Oct 18 Apr - 11 Oct 25 Feb - 22 Aug	15 Aug 5 Aug 30 Jan 19 Jan — 15 June 4 June — 28 Nov 17 Nov 7 Nov 2 Apr 23 Mar — 16 Sep 5 Sep
1241 1242 1243 1244 1245 1246 1247 1248 1249 1250	27 Apr - 21 Oct 8 Mar - 31 Aug 25 Feb - 19 Aug 13 Feb - 9 Aug 24 Dec 19 June - 13 Dec 7 June - 2 Dec 28 May 18 Apr - 12 Oct	6 Oct 26 Sep 22 Mar 10 Mar — 5 Aug 25 July 19 Jan — 14 July 8 Jan 24 May 14 May — 6 Nov	1291 1292 1293 1294 1295 1296 1297 1298 1299 1300	14 Feb — 11 Aug 4 Feb — 30 July 15 Dec 9 June — 4 Dec 30 May — 23 Nov 18 May 9 Apr — 2 Oct 29 Mar — 21 Sep 18 Mar — 11 Sep	25 Aug 21 Jan 9 Jan — 5 July 25 June 8 Nov 28 Oct 23 Apr 12 Apr 27 Aug 21 Feb — 15 Aug

## TABLE XVIII.-(Continued.)

## List of Eclipses.

A.D.	LUNAR.	SOLAB.	<b>▲</b> .D.	LUNAR.	Solar.
1301 1302 1303 1304 1305 1306 1307 1308 1309 1310	25 Jan — 21 July 14 Jan — 10 July 4 Jan — 29 Jnne 20 May — 13 Nov 9 May — 2 Nov 29 Apr — 22 Oct 8 Mar — 1 Sep 25 Feb — 21 Aug 14 Feb — 11 Aug	9 Feb 26 June 15 June — 9 Dec 4 June — 28 Nov 17 Nov 13 Apr 3 Apr 15 Sep 11 Feb 31 Jan	1351 1352 1353 1354 1355 1356 1356 1357 1358 1359 1360	4 Nov 30 Apr - 23 Oct 19 Apr - 13 Oct 27 Feb - 23 Aug 16 Feb - 11 Aug 5 Feb - 31 July 16 Dec 11 June - 5 Dec 31 May - 23 Nov	14 May 28 Sep 25 Mar — 17 Sep 14 Mar — 6 Sep 28 July 17 July { 10 Jan — 7 July 31 Dec 15 May
1311 1312 1313 1314 1315 1316 1317 1318 1319 1320	26 Dec 19 June - 14 Dec 9 June - 3 Dec 30 May 20 Apr - 13 Oct 8 Apr - 2 Oct 28 Mar - 21 Sep 5 Feb - 1 Ang 26 Jan - 20 July	20 Jan — 16 July 5 July 15 May — 8 Nov 4 May 22 Apr 6 Sep 3 Mar 21 Feb 10 Feb — 6 July	1361 1362 1363 1364 1365 1366 1366 1367 1368 1369 1370	4 Oct 30 Mar — 23 Sep 18 Mar — 12 Sep 27 Jan — 22 July 16 Jan — 12 July 5 Jan — 1 July 14 Nov	5 May 18 Oct 4 Mar 21 Feb 7 Aug 27 July — 22 Dec 10 Dec 5 June 25 May
1321 1322 1323 1324 1325 1326 1327 1328 1329 1330	14 Jan — 10 July 24 Nov 21 May — 13 Nov 9 May — 1 Nov 19 Mar — 12 Sep 8 Mar — 2 Sep 25 Feb — 21 Aug { 5 Jan — 1 July 26 Dec }	26 June 15 June — 9 Dec 29 Nov 24 Apr 13 Apr — 7 Oct 26 Sep 16 Sep 27 July 16 July	1371 1372 1373 1374 1376 1376 1377 1378 1379 1380	9 Mar — 2 Sep 27 Feb — 22 Aug 16 Feb — 12 Aug 26 Deo 22 June — 15 Dec 11 June — 4 Dec 31 May — 24 Nov	9 Oct 4 Apr — 27 Sep 24 Mar — 17 Sep 14 Mar — 8 Aug 29 July 17 July 10 Jan — 31 Dec 27 May 16 May 5 May
1331 1332 1333 1334 1335 1336 1337 1338 1339 1340	20 June — 15 Dec 9 June 30 Apr — 23 Oct 19 Apr — 13 Oct 8 Apr — 3 Oct 15 Feb — 12 Aug 5 Feb — 1 Aug 26 Jan — 21 July 4 Dec	25 May	1381 1382 1383 1384 1385 1386 1387 1388 1389 1390	16 Jan — 12 July 25 Nov 21 May — 14 Nov 10 May — 4 Nov	18 Oct 29 Aug 17 Aug 6 Aug 1 Jan - 22 Dec 16 June δ June 9 Oct
1341 1342 1343 1344 1345 1346 1347 1348 1349 1350	29 Mar — 23 Sep 18 Mar — 12 Sep 8 Mar — 1 Sep	9 Dec 5 May 25 Apr — 19 Oct 7 Oct 26 Sep 22 Feb 11 Feb — 7 Aug 26 July 10 Dec 30 Nov	1391 1392 1393 1394 1395 1396 1397 1398 1399 1400	6 Mar — 2 Sept 27 Feb — 22 Aug 6 Jan — 3 July 26 Dec } 21 June — 15 Dec 11 June — 4 Dec 26 Oct	5 Apr 24 Mar 8 Aug 28 July 11 Jan — 6 June 26 May 16 May — 9 Nov 29 Oct 26 Mar

217

## TABLE XVIII.-(Continued.)

List of Eclipses.

				1	
A.D.	LUNAR.	Solar.	A. D.	LUNAR.	SOLAR
1401	30 Mar				
	13 Aug	15 Mar — 8 Sep 4 Mar	1451 1452	17 Jan — 13 July 7 Jan — 27 Nov	28 June 17 June — 11 Dec
1403	7 Feb — 2 Aug	18 Aug	1453		30 Nov
1404 1405	27 Jan - 22 July 6 Dec		1454	12 May - 5 Nov	27 Apr
	2 June — 25 Nov	1 Jan — 26 June 16 June	1455 1456	1 May — 25 Oct 22 Mar	17 Apr - 11 Oct
1407	22 May - 15 Nov	31 Oct	1457		5 Apr 18 Sep
	10 May 31 Mar	26 Apr - 19 Oct	1458	28 Feb - 24 Aug	
	21 Mar — 13 Sep	15 Apr — 9 Oct 4 Apr	1459	{8 Jan — 3 Jaly }	3 Feb — 29 July
			1460	$\left\{\begin{array}{c} 3 \text{ Jan} = 3 \text{ Jan} \\ 28 \text{ Dec} \end{array}\right\}$	18 <b>J</b> ul <del>y</del>
		19 Aug			
1412 1413	22 Aug 17 Jan - 13 July	12 Feb - 7 Aug	1461	22 June - 17 Dec	7 July — 2 Dec
	17 Jan — 13 July (6 Jan — 3 July)	1 Feb	1462 1463	12 June	21 Nov
1414	1 26 Dec	17 June	1464		18 May - 11 Nov 6 May
1415 1416	22 June — 16 Dec 5 No <b>v</b>	7 June		11 Apr - 4 Oct	20 Sep
1417	1 May - 25 Oct	27 May — 19 Nov		24 Sep 15 Aug	16 Mar 6 Mar
	20 Apr - 14 Oct	6 Apr	1468	8 Feb - 4 Aug	
1419 1420	10 Apr 90 Eulo 92 Apr	26 Mar	1469	27 Jan - 24 July	9 July
1120	29 Feb — 23 Aug	14 Mar — 8 Sep	1470	17 Jan — 8 Dec	28 June - 22 Dec
1421	17 Feb - 13 Aug	28 Aug	1471	3 June - 27 Nov	
1455	6 Feb — 2 Aug	23 Jan		22 May - 15 Nov	8 May
	17 Dec 12 June — 6 Dec	8 July	1473	12 May - 4 Nov	27 Apr
1425	1 June - 25 Nov	26 June 10 Nov	1474	22 Mar — 15 Sep	16 Apr — 11 Oct 30 Sep
	21 May	7 Maỳ	1476	10 Mar - 3 Sep	25 Feb
	11 Apr 31 Mar — 23 Sep	20 Oct	1477		8 Aug
1429	20 Mar - 13 Sep	14 Apr 30 Aug		18 Jan — 15 July 18 Jan — 4 July (	29 July
1450	2 Sep	19 Aug	1479	29 Dec }	19 July —13 Dec
1431	24 July	12 Feb - 8 Aug	1100		
1432	17 Jan - 13 July	2 Feb - 27 June	1481		28 May
1433	(6 Jan - 2 July )	17 June	1482	3 May - 26 Oct	17 May
1434	16 Nov	7 June - St) Nor	1483	22 Apr — 16 Oct 4 Oct	2 Oct
1435	12 May - 6 Nor	20 Nov	1484 1485		20 Sep 16 Mar — 9 Sep
	30 Apr - 25 Oct	16 Apr	1486	18 Feb 15 Aug	6 Mar
	20 Apr — 14 Oct 11 Mar — 3 Sep	5 Apr — 30 Sep 19 Sep	1487	8 Feb — 4 Aug 28 Jan	20 July
1439	1 Mar - 24 Aug	8 Sep		28 Jan 13 June - 8 Dec	9 July 1 Jan - 22 Dec
1440	18 Feb — 13 Aug	3 Feb	1490	2 June - 27 Nov	
	27 Dec	23 Jan — 18 July	1491	23 May 16 Nov	8 May
1442	23 June - 17 Dec	7 July	1492		26 Apr - 21 Oct
1444	12 June — 7 Dec 31 May	27 June 10 No <del>r</del>	1493		10 Oct
1443		T NAT		22 Mar - 15 Sep 11 Mar - 4 Sep	7 Mar 25 Feb — 20 Aug
	11 Apr - 3 Oct	26 Apr	1496	30) Jan — 25 July	14 Feb - 8 Aug
1447 1443		10 Sep 5 Mar - 29 Aug	1497		
1449	4 Aug	18 Aug	149% 1499	8 Jan — 3 July	13 Dec 8 June
3420		12 Feb		13 May - 6 Nov	28 May

### TABLE XVIII.-(Continued.)

List of Eclipses.

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A.D.	LUNAR.	SOLAR.	A.D.	LUNAR.	SOLAR,
A.D.	LUNAR,	DULAN.	А.D.	LUNAR.	SOLAR,
1501	3 May - 26 Oct	12 Oct	1551	20 Feb - 16 Aug	31 Aug
1502	22 Apr - 15 Oct	7 Apr - 1 Oct	1552	10  Feb - 4  Aug	or Aug
1503	6 Sep	27 Mar - 20 Sep	1553	25 July	14 Jan
$1504 \\ 1505$	1 Mar - 25 Aug	16 Mar	1554	15 June- 9 Dec	29 June 19 June - 14 Nov
1506	18 Feb - 14 Aug 8 Feb	30 July 20 July	1555	5 June - 28 Nov 24 May - 17 Nov	2 Nov
1507	24 June - 19 Dec	13 Jan	1557		28 Apr -22 Oct
1508 1509	13 June - 7 Dec	2 Jan - 29 May	1558	2 Apr - 27 Sep	18 Apr
1510	2 June – 26 Nov	18 May 8 May	1559 1560	23 Mar — 16 Sep 12 Mar — 4 Sep	21 Aug
		0 may	1000	in num a nop	
1211			1561	26 July	14 Feb - 11 Aug
1511 1512	13 Apr — 6 Oct 1 Apr — 25 Sep	17 Mar	1562	20 Jan - 16 July (9 Jan - 5 July)	
1513	30 Jan - 25 July	7 Mar	1563	(9 Jan - 5 July)	20 June
1514	9 Feb	20 Aug	1564	29 Dec 5	8 June
1515 1516	30 Jan — 25 July 19 Jan — 13 July	9 Aug	1565	15 May - 8 Nov	
1517	10 0 mi - 15 0 my	4 Jan — 23 Dec 19 June	1566	4 May - 28 Oct	19 Apr
1518	24 May - 17 Nov	8 June	1567	23 Apr - 18 Oct	9 Apr 28 Mar— 21 Sep
$1519 \\ 1520$	14 May - 6 Nov	28 May - 23 Oct	1569	3 Mar - 26 Aug	bep
1020	2 May - 26 Oct	11 Oct	1570	20 Feb - 15 Aug	5 Feb
		and a			and the second
$1521 \\ 1522$	10 10	7 Apr	1571	10 Feb - 5 Aug	25 Jan - 22 July
1523	12 Mar — 5 Sep 1 Mar — 26 Aug	27 Mar 11 Aug	1572 1573	25 June - 19 Dec 15 June - 8 Dec	15 Jan - 10 July 29 June - 24 Nov
1524	19 Feb	30 July	1574	4 June - 28 Nov	13 Nov
1525	4 July - 29 Dec	23 Jan	1575		10 May
1526 1527	24 June — 18 Dec 14 June — 7 Dec	13 Jan 30 May	1576	13 Apr — 7 Oct 2 Apr — 27 Sep	28 Apr 12 Sep
1528	11 June - 7 Dec	18 May - 12 Nov	1577 1578	23 Mar - 16 Sep	12.000
1529	23 Apr - 17 Oct	1 Nov	1579		25 Feb- 22 Ang
1530	12 Apr - 6 Oct	29 Mar	1580	31 Jan - 26 July	15 Feb
1531					00 T
1532	1 Apr - 26 Sep	30 Aug	1581	19 Jan — 16 July 8 Jan	30 June 20 June*-25 Dec
1533	9 Feb - 4 Aug	20 Aug	1582	5 June - 29 Nov	
1534	30 Jan - 25 July	14 Jan	1584	24 May - 18 Nov	10 May
$1535 \\ 1536$	4 June - 27 Nov	3 Jan — 30 June 18 June	1585	13 May - 7 Nov	29 Apr 19 Apr - 12 Oct
1537	4 June - 27 Nov 24 May - 17 Nov	7 June	1586	24 Mar - 16 Sep	2 Oct
1538	14 May - 6 Nov	23 Oct	1588	13 Mar - 5 Sep	26 Feb
$1539 \\ 1540$		18 Apr - 12 Oct	1589	2 Mar - 25 Aug	15 Feb - 11 Aug
1010	22 Mar — 16 Sep	7 Apr	1590	17 July	4 Feb - 31 July
1541	12 Mar - 5 Sep	21 Aug	1501	(9 Jan - 6 July)	20 July - 15 Dec
$1542 \\ 1543$	1 Mar - 25 Aug	11 Aug	1591	) 30 Dec )	and the second se
	16 July (10 Jan 4 July)	3 Feb	1592 1593	24 June - 18 Dec	3 Dec 30 May - 23 Nov
1544	29 Dec	24 Jan	1593	4 May - 29 Oct	20 May - 25 Nov
1545	24 June - 18 Dec	9 June	1595	24 Apr - 18 Oct	3 Oct
1546 1547	4 May - 28 Oct	29 May - 23 Nov 12 Nov	1596	12 Apr - 6 Oct	22 Sep 17 Mar
1548	22 Apr - 17 Oct	8 Apr	1597 1598	21 Feb - 16 Aug	7 Mar
1549	12 Apr - 6 Oct	29 Mar	1599	10 Feb - 6 Aug	22 July
1550		18 Mar	1600	30 Jan	10 July
-					

\* From this year all the dates are given in the Gregorian Calendar, or New Style.

## TABLE XVIII.--(Continued.)

List of Eclipses.

1					
A.D.	LUNAR.	SOLAR.	A.D.	LUNAR.	SOLAR.
1601 1602 1603 1604 1605 1606 1607 1608 1609 1610	15 June — 9 Dec 4 June — 29 Nov 24 May — 18 Nov 3 Apr — 27 Sep 24 Mar — 16 Sep 13 Mar — 6 Sep 27 July 20 Jan — 16 July {9 Jan — 6 July 30 Dec	{ 4 Jan-30 June 24 Dec 21 May 11 May 29 Apr 12 Oct 26 Feb 10 Aug 30 July - 26 Dec 15 Dec	1651 1652 1653 1654 1655 1656 1657 1658 1659 1660	25 Mar - 17 Sep 14 Mar - 7 Sep 3 Mar - 27 Aug (11 Jan - 6 July) 31 Dec 5 June - 20 Dec 6 May - 30 Oct 25 Apr - 18 Oct	8 Apr 29 Mar 12 Aug 6 Feb — 2 Aug 26 Jan 11 June 1 June — 24 Nov 14 Nov 3 Nov
1611 1612 1613 1614 1615 1616 1617 1618 1619 1620	14 May — 8 Nov 4 May — 28 Oct 24 Apr — 17 Oct 3 Mar — 27 Aug 20 Feb — 16 Aug 9 Feb — 6 Aug 26 June — 21 Dec 15 June — 9 Dec	4 Dec 30 May 3 Oct 29 Mar — 22 Sep 1 Aug 11 July 31 May	1661 1662 1663 1664 1665 1666 1667 1668 1669 1670	22 Feb — 18 Aug 11 Feb — 6 Aug 31 Jan — 26 July 16 June — 11 Dec 6 June — 30 Nov 26 May — 18 Nov	30 Mar 20 Mar — 12 Sep 28 Jan — 21 Aug 16 Jan — 5 Jan — 2 July 21 June 4 Nov 30 Apr 19 Apr
1621 1622 1623 1624 1625 1626 1627 1628 1629 1630	4 June — 29 Nov 15 Apr — 8 Oct 3 Apr — 26 Sep 24 Mar — 16 Sep 7 Aug 31 Jan — 28 July 20 Jan — 16 July 9 Jan 26 May — 19 Nov	21 May 10 May 3 Nov 19 Mar 26 Feb — 21 Aug 11 Aug 6 Jan — 25 Dec 21 June — 14 Dec 10 June	1671 1672 1673 1674 1675 1676 1677 1678 1679 1680	13 Mar — 7 Sep 22 Jan — 17 July 11 Jan — 7 July 1 Jan — 25 June 17 May — 9 Nov 6 May — 29 Oct	3 Sep 22 Aug 12 Aug 23 June 11 June - 5 Dec 24 Nov 21 Apr - 14 Nov 10 Apr 30 Mar
1631 1632 1633 1634 1635 1636 1637 1638 1639 1640	15 May — 8 Nov 4 May — 27 Oct 14 Mar — 7 Sep 3 Mar — 28 Aug 20 Feb — 16 Aug 7 July — 31 Dec 26 June — 21 Dec 15 June — 10 Dec	31 May 25 Oct 8 Apr 3 Oct 29 Mar 12 Aug 1 Aug 26 Jan 15 Jan 1 June	1681 1682 1683 1684 1685 1686 1687 1688 1689 1690	11 Feb — 7 Aug 27 June — 21 Dec 16 June — 10 Dec 6 June — 29 Nov 15 Apr — 9 Oct 4 Apr — 29 Sep	12 Sep 1 Sep 27 Jan - 24 July 12 July 1 July 11 May - 5 Nov 30 Apr 13 Sep 3 Sep
1643 1644	15 Apr — 8 Oct 4 Apr — 27 Sep 10 Feb — 7 Aug 31 Jan — 27 July 20 Jan 5 Jpne — 30 Nov 26 May — 19 Nov	10 June — 4 Nov	1691 1692 1693 1694 1695 1696 1697 1698 1699 1700	2 Feb 28 July 22 Jan 17 July 11 Jan 7 July 18 May 20 Nov 16 May 9 Nov 6 May 29 Oct 15 Mar 9 Sep	28 Feb 17 Feb 3 July 29 June — 16 Dec o Dec 21 Apr 4 Oct 23 Sep 19 Feb

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### TABLE XVIII.—(Continued.)

List of Eclipses.

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A.D.	LUNAR.	Solab.	A.D.	LUNAR.	Solab.
1701 1702 1703 1704 1705 1706 1707 1708 1709 1710	22 Feb — 18 Aug 3 Jan — 29 June 23 Dec 17 June — 11 Dec 28 Apr — 21 Oct 17 Apr — 11 Oct 5 Apr — 29 Sep 13 Feb — 9 Aug	7 Feb — 4 Aug 24 July 14 July 8 Dec 27 Nov 12 May 2 May 14 Sep 11 Mar — 4 Sep 28 Feb	1751 1752 1753 1754 1756 1756 1757 1758 1759 1760		25 May 13 May — 6 Nov 26 Oct 23 Mar — 16 Oct 12 Mar 1 Mar 14 Aug 30 Deo 19 Dec 13 June
1711 1712 1713 1714 1715 1716 1717 1718 1719 1720	3 Feb — 29 July 23 Jan — 18 July 8 June — 2 Dec 29 May — 21 Nov 18 May — 11 Nov 27 Mar — 20 Sep 16 Mar — 9 Sep 6 Mar — 29 Aug	15 July 3 July — 28 Dec 17 Dec 7 Dec 3 May 22 Apr — 15 Oct 2 Mar — 24 Sep 19 Feb 8 Feb — 4 Aug	1761 1762 1763 1764 1765 1766 1767 1768 1769 1770	18 May — 12 Nov 8 May — 1 Nov 18 Mar — 10 Sep 7 Mar — 30 Aug 24 Feb — 20 Aug 4 Jan — 23 Dec 19 June — 13 Dec	3 June 17 Oct 13 Apr - 7 Oct 1 Apr 16 Aug 5 Aug 30 Jan 8 Jan - 4 June 25 May - 17 Nov
1721 1722 1723 1724 1725 1726 1727 1728 1729 1730	13 Jan — 9 July 2 Jaa — 29 June { 19 Dec } 8 May ~ 1 Nov 27 Apr — 21 Oct 16 Apr — 11 Oct 25 Feb — 19 Aug 13 Feb — 9 Aug 3 Feb — 29 July	24 July — 19 Dec 8 Dec 3 June 22 May 12 May — 6 Oct 25 Sep 15 Sep 26 July 16 July	1771 1772 1773 1774 1775 1776 1777 1777 1778 1779 1780		3 Apr - 26 Oct 23 Mar 12 Mar - 6 Sep 26 Aug 21 Jan 9 Jan - 5 July 10 June - 4 Dec 14 June - 8 Nov 27 Oct
1731 1732 1733 1734 1735 1736 1737 1738 1739 1740	20 Jan — 13 Dec 8 June — 1 Dec 28 May — 21 Nov 7 Apr — 2 Oct 26 Mar — 20 Sep 16 Mar — 9 Sep 24 Jan — 20 July 13 Jan — 9 July	<pre>{8 Jan - 4 July } } 29 Dec } 7 Dec 13 May 3 May 6 Oct 4 Oct 1 Mar 15 Aug 4 Aug 30 Dec 18 Dec</pre>	1781 1782 1783 1784 1786 1786 1786 1787 1788 1689 1790	29 Mar - 21 Sep 18 Mør - 10 Sep 7 Mar - 30 Aug 14 Jan - 11 July {3 Jan - 30 June} 24 Dec 9 May - 3 Nov 29 Apr - 23 Oct	23 Apr 17 Oct 12 Apr 16 Aug 9 Feb - 5 Aug 30 Jan 19 Jan 15 June 4 June 17 Nov
1741 1742 1743 1744 1745 1746 1746 1747 1748 1749 1750		23 May — 17 Oct 6 Oct 2 Apr 22 Mar 11 Mar — 6 Aug	1791 1792 1793 1794 1795 1796 1797 1798 1799 1800	18 Apr - 12 Oct 25 Feb - 21 Aug 14 Feb - 11 Aug 4 Feb - 31 July 14 Dec 9 June - 4 Dec 29 May - 23 Nov 9 Apr - 2 Oct	3 Apr 16 Sep 5 Sep 31 Jan 21 Jan — 16 July 10 Jan — 4 July 24 June 8 Nov 24 Apr

## TABLE XVIII.--(Continued.)

List of Eclipses.

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A.D.	LUNAB.	Solab.	A.D.	LUNAB.	SOLAR.
1801 1802 1803 1804 1805 1806 1807 1808 1809 1810	30 Mar — 22 Sep 19 Mar — 11 Sep 26 Jan — 22 July 15 Jan — 11 July 5 Jan — 30 June 21 May — 15 Nov 10 May — 3 Nov 30 April — 23 Oct		1851 1852 1853 1854 1855 1856 1857 1858 1859 1858	{7 Jan — 1 July } 26 Dec } 21 June 12 May — 4 Nov 2 May — 25 Oct 20 Apr — 13 Oct	28 July 11 Dec 16 May 29 Sep 18 Sep 15 Mar 29 July 18 July
1811 1812 1813 1814 1815 1816 1817 1818 1819 1820	10 Mar — 2 Sep 27 Feb — 22 Aug 15 Feb — 12 Aug 26 Dec 21 June — 16 Dec 10 June — 4 Dec 30 May 21 Apr — 14 Oct 10 Apr — 3 Oct 29 Mar — 22 Sep	1 Feb 21 Jan — 17 July 7 July 19 Nov 16 May — 9 Nov 5 May 26 Apr — 19 Sep 7 Sep	1861 1862 1863 1864 1865 1866 1867 1868 1869 1869 1870	17 Dec 12 June — 6 Dec 2 June — 25 Nov 11 Apr — 4 Oct 31 Mar — 24 Sep 20 Mar — 14 Sep 28 Jan — 23 July 17 Jan — 12 July	<pre>{11 Jan - 8 July 31 Dec 21 Dec 17 May 19 Oct - 6 May 19 Oct 16 Mar - 8 Oct 6 Mar 23 Feb - 18 Aug 7 Aug 22 Dec</pre>
1821 1822 1823 1824 1825 1826 1827 1828 1829 1830	6 Feb — 3 Aug 26 Jan — 23 July 16 Jan — 11 July 1 June — 25 Nov 21 May — 14 Nov 11 May — 3 Nov 20 Mar — 13 Sep 9 Mar — 2 Sep	4 Mar 11 Feb — 8 July 26 June — 20 Dec 16 June 29 Nov 26 Apr 14 Apr — 9 Oct 28 Sep 23 Feb	1871	6 Jan — 2 July 22 May — 15 Nov 12 May — 4 Nov 1 May — 25 Oct 10 Mar — 3 Sep 27 Feb — 23 Aug 17 Feb — 13 Aug 28 Deo. 22 June — 16 Dec	18 June — 12 Dec 6 June 26 May 10 Oct 6 Apr — 29 Sep 15 Mar — 9 Aug 29 July 22 Jan — 19 July 11 Jan — 31 Dec
1831 1832 1833 1834 1835 1836 1837 1838 1839 1840	10 Apr — 3 Oct	27 July 17 July 27 May — 20 Nov 15 May 4 May 15 Mar — 7 Sep 4 Mar	1881 1882 1883 1884 1885 1886 1887 1888 1889 1890	12 June — 5 Dec 22 Apr — 16 Oct 10 Apr — 4 Oct 30 Mar — 24 Sep 8 Feb — 3 Aug 26 Jan — 23 July 17 Jan — 12 July 3 June — 26 Nov	28 May 17 May — 11 Nov 31 Oct 27 Mar — 19 Oct 29 Aug 19 Aug 22 Dec 17 June
1841 1842 1843 1844 1845 1846 1847 1848 1849 1850	6 Feb — 2 Aug 26 Jan — 22 July 12 June — 7 Dec 31 May — 25 Nov 21 May — 14 Nov 31 Mar — 24 Sep 19 Mar — 13 Sep 9 Mar — 2 Sep	21 Feb — 18 July 8 July 21 Dec 6 May 25 Apr — 20 Oct 9 Oct 27 Sep 23 Feb 12 Feb — 7 Aug	1891 1892 1893 1894 1895 1896 1897 1898 1899 1900	11 May — 4 Nov 21 Mar — 15 Sep	6 June 16 Apr 6 Apr — 29 Sep 26 Mar — 20 Aug 9 Aug 22 Jan 11 Jan — 8 June 28 May — 22 Nov

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# TABLE XVIII.-(Concluded.)

List of Eclipses.

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A.D.	LUNAR.	SOLAR.	A.D.	LUNAR.	SOLAR.
1901 1902 1903 1904 1905 1906 1907 1908 1909 1910	3 May - 27 Oct 22 Apr - 17 Oct 11 Apr - 6 Oct 19 Feb - 15 Aug 9 Feb - 4 Aug 29 Jan - 25 July 7 Dec 4 June - 27 Nov 24 May - 17 Nov	18 May - 11 Nov 31 Oct 29 Mar - 21 Sep 17 Mar 30 Aug 20 Aug 14 Jan 27 June - 23 Dec 17 June 2 Nov	1951 1952 1953 1954 1955 1956 1957 1958 1959 1959	10 Feb — 5 Aug 29 Jan — 26 July 19 Jan — 16 July 29 Nov 24 May — 18 Nov 13 May — 7 Nov 3 May 24 Mar — 17 Sep 13 Mar — 5 Sep	1 Sep 25 Feb — 20 Aug 14 Feb — 11 July 30 June — 25 Dec 20 June — 14 Dec 2 Dec 23 Oct 19 Apr 2 Oct 20 Sep
1911 1912 1913 1914 1915 1916 1917 1918	1 Apr - 26 Sep 22 Mar - 15 Sep 11 Mar - 4 Sep 18 Jan - 15 July (8 Jan - 4 July) (8 Jan - 4 July) 28 Dec 24 June	22 Oct 17 Apr - 10 Oct 21 Aug 14 Feb - 10 Aug 3 Feb 23 Jan - 19 June 8 June - 3 Dec	1961 1962 1963 1964 1965 1966 1967 1968	2 Mar - 26 Aug {9 Jan - 6 July} 30 Dec } 25 June - 19 Dec 14 June 4 May - 29 Oct 24 'Apr - 18 Oct 113 Apr - 22 } Sep - 6 Oct }	11 Aug 4 Feb — 31 July 25 Jan 9 July — 4 Dec 23 Nov 20 May — 12 Nov 9 May
1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929	8 Nov 3 May - 27 Oct 22 Apr - 16 Oct 3 Mar - 26 Ang 20 Feb - 14 Ang 8 Feb - 4 Ang 19 Dec 15 June - 8 Dec 3 June - 27 Nov 23 May	29 May - 22 Nov 10 Nov 8 Apr - 1 Oct 28 Mar 17 Mar - 10 Sep 30 Aug 24 Jan 14 Jan - 8 July 29 June 19 May - 12 Nov 9 May - 1 Nov	1977 1978 1979	21 Feb — 17 Aug 10 Feb — 6 Aug 30 Jan — 26 July 10 Dec { 4 June — 29 Nov 25 May — 18 Nov 13 May 4 Apr — 27 Sep 24 Mar — 16 Sep 13 Mar — 6 Sep	18 Mar 7 Mar 25 Feb — 22 July 4 Jan — 30 June 24 Dec 13 Dec 11 May 29 Apr — 23 Oct 18 Apr 2 Oct 26 Feb
1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940	8 Jan — 4 July 18 Nov 14 May — 7 Nov 3 May — 28 Oct	17 Apr 24 Feb - 21 Aug 14 Feb - 10 Aug 19 June 2 Dec 22 Nov 19 Apr 1 Oct	1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990	17 July 19 Jan - 6 July 20 Sep 4 May - 28 Oct 24 Apr - 17 Oct 27 Aug 20 Feb - 17 Aug 9 Feb - 6 Aug	16 Feb 31 July 20 July — 15 Dec 11 June — 4 Dec 30 May 12 Nov 29 Mar — 23 Sep 18 May — 11 Sep 22 July
1941 1942 1943 1944 1945 1946 1947 1948 1949 1950	20 Feb - 15 Aug 29 Dec 25 June - 19 Dec 14 June - 8 Dec 3 June 23 Apr - 18 Oct 13 Apr - 7 Oct		1991 1992 1993 1994 1995 1996 1997 1998 1999 2000	4 June - 29 Nov 25 May 15 Apr 3 Apr - 27 Sep 16 Sep 28 July	24 Dec 21 May 10 May - 3 Nov 29 Apr - 24 Oct 12 Oct 9 Mar 26 Feb - 22 Aug 16 Feb - 11 Aug 31 July

223

### TABLE XIX. THE DAKHINI CYCLE OF JUPITER.

The Jovian cycle of 60 years, as used in Southern India, is a simple period of 60 solar years, in which year has a separate name. There are no omitted years as in the Northern reckoning, and the cycle has no longer any connection with Jupiter's revolution. The cycles begin in the following years A.D., with the year named Prabhava:

A. D.	7					_	_
	67	367	667	<b>9</b> 67	1267	1567	1867
	127	427	727	1027	1327	1627	1927
	187	487	787	1087	1387	1687	1987
	247	547	847	1147	1447	1747	2047
	307	607	907	1207	1507	1807	2107

The names of the 60 years of the cycle of Jupiter are the same both in Northern and Southern India. They are as follows :---

1	Prabhava.	16	Chitrabhânu.	31	Hemalamba.	46	Paridhâvin.
2	Vibhava.	17	Subhânu.	32	Vilambin.	47	Pramâdin.
3	Sukla.	18	Târana.	33	Vikârin.	48	Ananda.
4	Pramoda.	19	Pârthiva.	34	Sarvari.	49	Râkshasa.
5	Prajâpati.	20	Vyaya.	35	Plava.	50	Anala.
6	Angiras.	21	Sarvajit.	36	Sabhakrit.	51	Pingala.
7	Srimukha.	22	Sarvadhârin.	37	Sabhakrit.	52	Kalayutka.
8	Bhâva.	23	Virodhin.	38	Krodhin.	53	Siddhartha.
9	Yuvan.	24	Vikrita.	39	Viswâvasu.	54	Randra.
10	Dhâtar.	25	Khara.	40	Parâbhava.	55	Durmati.
11	Iswara.	26	Nandana.	41	Plavanga.	56	Dundubhi.
12	Bahudhânya.	27	Vijaya.	42	Kilaka.	57	Udg <b>år</b> in.
13	Pramâthin.	28	Jaya.	43	Saumya.	58	Raktaksha.
14	Vikrama.	29	Manmatha.	44	Sádharana.	59	Krodha.
15	Vrisha.	30	Durmukha.	45	Virodhakrit.	60	Kshaya.

As an example of the use of this Dakhini cycle, I may cite the date of the Kurda inscription (Royal Asiat. Soc. Jour., III., 104), which is recorded as Sake 894 (A.D. 972), with the Jupiter year named Angiras. As this is the 6th name, we obtain the date intended by adding 5 years to the 1st year of the cycle, which began previously to A.D. 972. This is A.D. 967, to which adding 5 we get 972 A.D., in exact accordance with the Sake date of 894.

#### INITIAL DAYS OF ILAHI YEARS.

#### TABLE XX.

### INITIAL DAYS OF ILAHI YEARS.

The Ilahi is a true solar year beginning with the Nauroz (in March). The initial days in the Hijra reckoning are taken from Dowson's Table as given by Abul Fazl. The corresponding Christian dates have been calculated, and a few palpable errors have been corrected.

LAHI.		Months.	A. H.	March	h.	A. D.	9	ILAHI.		Months.	A. H.	Marel	h.	A. D.
1	27	Rabi II	963	Tues	10	1556		26	5	Safar	989	Sat	11	158
2	9	Jumadi I	964	Wed	10	1557		27	15	-	990	s	11	158
3	20	_	965	Thur	10	1558		28	26		991	Mon	11	158
4	2	Jumadi II	966	Frid	10	1559		29	8	Rabi I	992	Tues	10	158
5	12		967	S	11	1560		30	19	_	993	Thur	11	158
6	23		968	Tues	11	1561		31	29		994	Thur	10	158
7	5	Rajab	969	Wed	11	1562		32	11	Rabi II	995	Sat	11	158
8	16		970	Thur	11	1563		33	22		996	Mon	11	158
9	27		971	Sat	10	1564		34	4	Jumadi I	997	Tues	11	158
10	8	Shabân	972	s	11	1565		35	14		998	Wed	11	159
11	18		973	s	10	1566		36	24	-	999	Wed	10	15
12	29		974	Tues	11	1567	1	37	5	Jumadi II	1000	Thur	10	15
13	11	Ramzán	975	Wed	10	1568	1.0	38	17		1001	S	11	159
14	22		976	Thur	10	1569		39	28		1002	Mon	11	159
15	2	Shawâl	977	Frid	10	1570		40	9	Rajab	1003	Mon	10	159
16	14		978	s	11	1571		41	20	-	1004	Wed	10	159
17	25	-	979	Tues	11	1572	2	42	2	Shabân	1005	Frid	11	159
18	6	Zilkada	950	Tues	10	1573		43	13		1006	Sat	11	159
19	17	-	981	Wed	10	1574		44	23		1007	S	11	159
20	27	-	982	Thur	10	1575		45	4	Ramzân	1008	s	9	160
21	9	Zìl-hijja	983	Sat	10	1576		46	15		1009	Tues	10	160
22	20		984	s	10	1577		47	28	-	1010	Wed	10	160
23	2	Muharram	986	Tues	11	1578		48	6	Shawâl	1011	Wed	9	160
24	12	-	987	Wed	11	1579		49	17	-	1012	Frid	9	160
25	24		988	Frid	11	1580		50	28		1013	Sat	9	160

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#### THE ABJAD.

#### TABLE XXI.

#### THE ABJAD.

A favourite mode of recording Hijra dates is by the numerical values of the letters in some short phrase, or chronogram, descriptive of the event commemorated. This system is called *Abjad*, from the first four letters of the Hebrew alphabet, from which the scheme was borrowed, namely, a, b, j, d. The whole scheme is as follows :—

Letters.	Values.	Letters.	Values.		Letters.	Values.
a	1	i	10		k	100
Ъ	2	k	20		<b>r</b>	200
j	3	1	30		sh	300
d	4	m	40		ι	400
<u>م</u> .	5	n	50			500
0. 10.	6		60		kh	600
£	7	ai <b>n</b>	70	i l	 5	700
<u>ћ</u>	8	ſ	80		. 540	800
ţ	9	<b>81</b> 0	90			
					<b>5</b>	900
L		l			gh	1000

Occasionally the chronograms were very tersely and happily expressed, and the fortunate inventors were usually rewarded very liberally. The following are rather favourable specimens of these *Abjad* chronograms:

1.- Wafdt Firoz records the "Death of Firoz" in A. H. 790.

2.—Masjid Jâmi ul Shark records the building of the Great Mosque at Jaunpur in A. H. 852.

3.-Az átash murd, "he died by fire," records the date of the death of Sher Shah, who was killed at the siege of Kålinjar by the bursting of a shell.

4.—Zawal Khusroan, or the "Ruin of the Kings," was invented by Ghulam Ali Hindu Shah, the father of the historian Ferishta, to commemorate the deaths, in A. H. 961, of the three kings,\*

> Mahmud Shâh of Gujarât. Burhân Nizâm Shah of Ahmednagar. Islâm Shâh, Sûr, of Delhi.

5.—Pul Muhammad Munim Khan, or "Bridge of Muhammad Munim Khan," at Jaunpur, gives the date A.H. 975.

<sup>\*</sup> Brigg's Ferishta, Vol. IV, 152. Islam Shah died within a few days of the end of A.H. 960.

#### THE ABJAD.

6.—In the old town of Hilsa in Bihâr, near the tomb of the holy Saint Jaman Madâri, there is an upright stone with the date of A.H. 1013, recorded in four different ways, as follows: \*

```
      In Arabio
      ... alf wa suls ashr = 1000 + 3 + 10 = 1013 A.H.

      ,, Persian
      ... hazâr wa sis-dah = 1000 + 13
      ... = 1013

      ,, Numerals
      ... 1013
      ... = 1013
      ... = 1013

      ,, Abjad
      ... d. w. b. a. sw . s
      Values below
      ... 4 + 6 + 2 + 1 + 800 + 200
      ... = 1043
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The values of the Abjad letters are engraved on the stone in numerals immediately below the letters.

\* See Archeological Survey of India, Vol. XI, 164.

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